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Art and Pragmatism:
James and Dewey on the Reconstructive Presuppositions of Experience

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Abstract

This dissertation connects the claims of James and Dewey (and to a lesser extent Peirce) to historically specific concerns that occasioned them, attending particularly to claims made with respect to the centrality of the reconstructive practices of art to those of experience. In unpacking these claims, I employ exegetical methods that R. G. Collingwood advocated when he emphasized that we cannot understand what philosophers have said without first comprehending the questions they meant to answer. At the same time, I also connect what classical pragmatists said to what others have said since, thereby heeding Dewey's admonition that it is only from the standpoint of where we have arrived that we can coherently register anything at all. By approaching the ideas of pragmatists in these ways—and by drawing occasional support from other thinkers such as Merleau-Ponty and Wittgenstein—I especially endeavour to establish that pragmatic conceptions of “experience as art” show that interactions in the world achieve outcomes traditionally attributed to inner operations of mind or brain; that insensitivity to this fuels seriously misplaced conceptions about how we relate to “reality”; and that these misplaced conceptions promulgate subjectivism on such a scale that even scientists become unwitting promoters of it. My overarching aims are to demonstrate, first, that classical pragmatists, contrary to what some recent interpretations suggest, understood their projects to be anti-sceptical; and, second, that classical pragmatists have bequeathed to us means by which we, too, may counter scepticism. Throughout this dissertation, I bear in mind that James called pragmatism “a new name for some old ways of thinking” and that Dewey repeatedly stressed that new ideas are reconstructed out of old ones. So while arguing that classical pragmatists challenged scepticism by turning traditional modern Western conceptions of experience inside out, I also examine how their work might be used to reorient and reinvigorate certain traditional notions.

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Introduction

I shall be attending in this dissertation to the core tenets of pragmatism, particularly as articulated by William James and John Dewey. Others have done so before me. What could I possibly hope to achieve by attending yet again to them?

Robin Collingwood (1939), nearing the end of his life, put his finger squarely on the problem that has led so many philosophers to render unfruitful accounts of their predecessors. Most have presumed they can register and weigh what others have said before them by attending to the statements they have made. As Collingwood protested, however, we “...cannot find out what a man means by simply studying his spoken or written statements” (p. 31). We cannot, he insisted, because a statement is an answer to a question, and identically worded statements can have very different meanings when they are responses to different questions. Hence we are not in a position to “...think [we] understand any statement made by a philosopher until [we] have decided, with the utmost possible accuracy, what the question is to which he means it for an answer” (p. 74); and we are not in a position to ascertain this unless we investigate the historical context in which the question arose as a viable provocation to inquiry (see pp. 61-63). This kind of investigation is open-ended and subject to ongoing revision, for the scope and limits of our own historical context of inquiry differ from those of the past, changing what we must do if we are to understand what others did before us (see pp. 75-76 & 114; also see Cameron 2004, pp. 21-26).

In the case of classical pragmatists, Collingwood's approach is especially helpful, for their choice of words was, as James (1909a) admitted, "unguarded" at times (p. 824). Consequently it is easy to misconstrue what they said, especially if one abstracts their statements from the contexts out of which they arose. Along just such lines, James complained that his detractors engaged in "vicious abstractionism" (p. 964), treating his words as "self-sufficients [sic.] with no context of varying relation that might be further asked about" (p. 964). This, in turn, led them to wrongly convict him and other pragmatists of "self-contradiction and absurdity" (p. 964). The mistake, James argued, was that critics assumed that "meanings and things meant, definitions and things defined, are equivalent and interchangeable, and nothing extraneous to its definition can be meant when a term is used" (p. 964). They failed to recognize, for example, that "[t]he social proposition that 'other men exist' and the pragmatist proposition 'it is expedient to believe that other men exist'"—though similarly worded—"come from different universes of discourse" (p. 965), and thus have different meanings. "The first expresses an object of belief, the second tells of one condition of the belief's power to maintain itself" (p. 965). Hence we "can believe [one] without being logically compelled to believe the [other]" (p. 965). We can also believe both, and even if one turns out to be false, we will not be guilty of a logical contradiction. We will not be because the two propositions answer different questions, and, as Collingwood observed, "[n]o two propositions . . . can contradict one another unless they are answers to the same question" (1939, p. 33).

If past critics easily misconstrued the questions that preoccupied James and Dewey, then the potential to misconstrue them today is especially great. It is, in the words of Collingwood (1939), because most philosophers "...write for their contemporaries, and in particular for those who are 'likely to be interested,' which means those who are already asking the question to which an answer is being offered" (p. 39). This means that "a writer very seldom explains what the question is that he is trying to answer. Later on, when he has become a 'classic' and his contemporaries are long dead, the question has been forgotten" (p. 39), and if the question is forgotten, the import of his response is obscured.

To weigh fruitfully the claims of pragmatists, therefore, we must identify the questions they were asking (for only then can the richness of their answers be assessed with respect to them), and then link those questions as historical precedents to the questions that concern us today. My aim in this dissertation, accordingly, is to revisit the questions that prompted James and Dewey, in particular, to say what they said as they said it, registering those queries at once more broadly and exactly than many have thought worth doing. I hope to show, by doing so, that many of the judgments that other philosophers have deemed objectionable, having failed to register the questions they were intended to answer while misconstruing them as answers to questions never asked, were not only worth pondering at the time but, when linked to others of resonant kind comprehensible only within our own era, remain uncommonly provocative even now.

I particularly wish to unpack the context of inquiry within which James and then Dewey developed a cumulative sequence of claims about "experience" and then "art" that

they deemed central to understanding what they were doing and why, for, as Collingwood would have stressed, only from within the historical context of questions that preoccupied these philosophers can we register and weigh the significance and usefulness of their claims.

James maintained that we play a role in making our own experience (1979a, p. 12; 1890i, p. 403). Dewey advanced a similar position, and, in his *Experience and Nature* (1925), he likened the making of experience to the making of art (p. 354 ff.). “Art” here meant *tekhne*, a kind of experienced knowing that brings things into appearance and realizes certain designs, as when a master artisan puts hard-won experience to the task of making new works; and in comparing experience to art, Dewey asserted what most pragmatic philosophers have agreed upon: that our experiences and ultimately our worlds are structured and built around practical handlings and doings carried out in the interest of realizing certain designs.

Almost a decade after making this assertion, Dewey published the book *Art as Experience* (1934). Here, too, the practical arts were used to model a general theory of experience. As compared to its predecessor, however, this book was more preoccupied with fine arts and aesthetic experience, by which Dewey meant experience that builds dramatically in time, culminating into an integrated whole, albeit a whole within which and through which individual elements acquire heightened distinctiveness. Dewey was particularly concerned with establishing that aesthetic experience occurs not just in the presence of artistic objects, but also in the course of everyday living. He was concerned, furthermore, with establishing that aesthetic experience entails a redeployment and

restructuring of our habitual ways of dealing with things; and since, on his account, our practiced habits structure our worlds, aesthetic experience also entails a restructuring or reconstruction of our worlds.

The notion that our worlds are built around our own practical interests and that we reshape worlds we have already constructed seems, on the face of it, to be a recipe for hopeless scepticism. James and Dewey clearly understood this not to be so. By measuring their work against questions that concerned them, I aim to cast new light on how they understood themselves to be pursuing an anti-sceptical agenda; and by relating their agenda to debates that persist today, I hope to develop a provocative account of how useful their work remains when grasped as a precursor to answers that we might offer in response to questions that currently preoccupy us.

I begin by explicating James' position that it is a mistake to suppose that we register a world that we come upon already existing; that this mistake fuels the empiricistic view that beliefs are "inner representations" that the "outer world" impresses upon the mind; and that this empiricistic view generates confused and hopelessly sceptical theories of knowledge. I also review how James' well-known pragmatic defence of our "right to believe" is, in fact, an attack on and alternative to sceptical theories of knowledge that undermine the basis upon which we can justify belief in anything whatever. It is well to note ahead of time that I situate James' critique of mainstream empiricism in the context of 19th century evolutionary theory. I do so because James held that empiricist psychologists and neo-Lamarckian evolutionists perpetuate the same basic model of mind, and he used Darwinian thinking to challenge

both schools. He particularly used it to justify his claim that subjective interests can emerge independently of environmental stimuli, and this claim was key to his critique of mainstream empiricism. It was key because he maintained that interests affect what we attend to and consequently what we experience. He also maintained that they shape our actions, and actions of a certain shape engender experiences of a certain shape. Thereby he was able to argue that our experiences are structured by factors that arise independently of the sensible world—a position that undercuts empiricistic theories of knowledge that start with the assumption that sense experience moulds the mind. In making this claim, I do not mean to suggest he completely rejected mainstream empiricism. On the contrary, I will argue that he strived to effect a kind of reconciliation between competing empiricist and rationalist schools.

Here it is worth stressing that it is not, as many might suppose, the emphasis on “adaptation” that particularly drew James to Darwinism. If this were the case, he might have just as easily embraced Spencer’s neo-Lamarckism—which, incidentally, he did for a brief period in his late teens or very early twenties (Richards 1987, p. 424). What James (1880), in fact, thought most crucial about Darwinism is that it discriminates between causes that generate and maintain a variation, and teaches us to see that the “two sets of causes belong to two . . . irrelevant cycles” (p. 622). It therewith teaches us to recognize the existence of “*different cycles of operation* in nature” that are “relatively independent of one another” (p. 621). Versions of this idea undergird everything from his theories of mind and knowledge to his attempts to justify the pragmatic grounds upon

which he defended certain beliefs to his pluralistic and indeterministic worldview.¹ In spite of this pervasive influence, Robert Richards is the only author I have encountered who develops a detailed historical account of how Darwinism informed James (see Richards 1987, chap. 9). Yet Richards does not show, as I will, that James used Darwinian thinking to broker a middle way between empiricism and rationalism. Nor does he specifically tie James' anti-sceptical project to the evolutionary debates that raged in his day.

Insofar as James held that actions in the world engender experiences, and insofar as he treated subjective interests as regulatory structures around which actions and therewith experiences are organized, his emphasis on subjective interests had a counterintuitive effect: it shifted the locus of human experience from the private, subjective level to that of the world. Dewey did likewise when he proposed that the phenomenon of experience emerges in much the same way as the phenomenon of art. In making this point, he emphasized the ancient roots of the word "experience" and other related terms. "Experience" comes from *experiri*—Latin for "try"—and is related to the word "expert," which implies skill. The word "empirical," which means based on experience, comes via Latin from the Greek word *empeirikos*; *empeiria* means "experience," and *empeiros* means "skilled," based on "experiment" or "trial," and thus based on action, for experimenting means acting on things in systematically varied ways.

¹ I will not attend particularly to how James' pluralistic and indeterministic worldview relates to Darwinism. However, I invite the reader to compare the passages from which I quote above to the definitions of pluralism and indeterminism that James offered in subsequently published works (1884, p. 570; 1907a, p. 556; 1909, p. 777), and to notice that they are not merely similar, but practically interchangeable.

For the ancient Greeks, wrote Dewey (1925), “[e]xperience . . . signified a store of practical wisdom, a fund of insights useful in conducting the affairs of life” (p. 354). Even today skilled people are called “experienced.” People become experienced when they acquire practiced habits of action that enable them to proficiently negotiate affordances and constraints of their world in such a way as to bring about certain desired ends; and the practiced actions they deploy fundamentally shape their experiences of the world. “Thus understood, experience is exemplified in the discrimination and skill of . . . good . . . [artisans]; experience is equivalent to art” (p. 354).

If Aristotle’s words are to be trusted, then Dewey exaggerated when he suggested that ancient Greeks equated experience (*empeiria*) to art (*tekhne*), for while Aristotle relates the two, he also differentiates them (see *Met.* 981a1-20). That Dewey embellished, however, does not undermine or alter his position that much of human experience emerges through practical transactions in the world. Nor does it threaten his notion that the human subject and other factors in the world of which the subject is a part behave simultaneously as artists and artistic media. This means they mutually work upon one another, as when a hiker’s stride presses into a sandy trail, and the trail presses back, modulating and patterning the hiker’s gait, so that a series of interactions integrates into experience. Here experience is not merely integrated in the sense that it pulls together like an artistic composition, but also in the sense that it arises out of a “thoroughgoing integration of what philosophy discriminates as ‘subject’ and ‘object’” (1934, p. 277). Again, the yielding sand modifies the hiker’s tread, the hiker’s tread the sand; and through this mutual shaping—this integration of one to the other—the sandy quality of

“soft give” is realized and brought concretely into experience. Through a range of descriptions too elaborate to summarize here, Dewey illustrated that what is so of the hiker’s stride is generally so of perception, experience and knowledge: they integrate, cohere and coordinate around actions in the world.

From this it may seem to follow that we can, by means of action, arbitrarily bring whatever we want into experience. However, this was clearly not Dewey’s point, for he recognized that we cannot act however we want. Our capacities for action are limited in scope, and the objects we encounter further constrain our actions. Once again, our situation is analogous to that of artists. Artists create, but not out of nothing. “Art is a process of production in which natural materials are re-shaped...” or reconstructed (1929a, p. xv), and the materials at hand impose structural limits on what artists can produce. If one defines “structural limits” as available potentialities, then experience itself becomes reconstructive, for the mutual adaptation of subject and object—the very heart of experience, according to Dewey—becomes a process of structures acting upon and exploiting the potentialities of one another; therewith it becomes a process of restructuring or reconstruction. To speak of things as “structures” in this sense is not to characterize them in terms of what they “are,” but in terms of what they allow, or as Dewey put it, in terms of “what they can do and what can be done with them” (1920, p. 115). In a very loose sense, it is to characterize them in terms of *a priori* limits.

The term “*a priori*” is especially associated with Immanuel Kant, a philosopher many pragmatists spurn. Yet some pragmatists identified with him, most notably, Charles Sanders Peirce, C. I. Lewis and Nelson Goodman. Goodman, in particular, identified his

Ways of Worldmaking (1978) as a book “belonging in that mainstream of modern philosophy that began [with] Kant” (p. x). Whereas thinkers predating Kant generally held that we only know what an object is when our cognition conforms to it, Kant famously proposed that knowing an object might mean bringing the object into conformity with cognition. He proposed, more specifically, that logic sets *a priori* limits on how the world can be cognized, and that people have knowledge and coherent experience only insofar as the phenomenal world is pulled into arrangements that conform with these limits. On the Kantian view, therefore, the phenomenal world is not simply given; it is constructed, put together and made—albeit not, for the most part, through any intentional decision making process.

It might be said, therefore, that pragmatism combines the Kantian insight that people play a role in constituting the phenomenal world with the American mythos that people make their world by the work of their own hands. It is a vision that Ralph Waldo Emerson (1936), who was, in fact, James’ godfather, anticipated with remarkable clarity. Though not a pragmatist or even a proto-pragmatist, Emerson, like Dewey, emphasized art as *tekhne* or craft. Relating the artistic to the practical, he suggested that artistic actions are modes through which “being” and “reality” pass into appearance; and with the aid of a peculiar mix of Kantianism, Platonism and a typically American “hands-on” ideology, he arrived at a philosophy of building and world-making, and so came to declare: “Whilst the abstract question occupies your intellect[,] nature brings it in the concrete to be solved *by your hands*. . . . So shall we come to look at the world with new eyes” and see that “Nature is not fixed but fluid. Spirit alters, moulds, makes it. . . .

Every spirit builds itself a house; and beyond its house a world. . . . *Build, therefore, your own world*” (p. 48; emphasis added).

While this vision of personal authorship is empowering, some are wont to object that it fates us to a subjective realm of merely personal perspectives. As stated at the outset, classical pragmatists believed we are actually saved from this fate by the very fact that we exercise some authorship over our worlds, and I have already outlined a number of reasons why they thought this is so: it undermines the notion that knowing is an affair of having mental representations of realities we never directly encounter; it shows that we are never in a position to arbitrarily experience things in any way whatever; and it shows that whatever may go on “inside our heads,” experience is not reducible to it.

In this dissertation, I will explicate and occasionally expand these lines of argument. In doing so, I will put before the reader a range of anti-sceptical claims that can be developed out of the philosophy of James and Dewey. I will especially strive to establish:

- i) That interactions in the world achieve outcomes traditionally attributed to inner operations of mind or brain; that insensitivity to this fuels seriously misplaced conceptions about “reality” and how we relate to it; and that these misplaced conceptions promulgate subjectivism on such a scale that even scientists become unwitting promoters of it.
- ii) That a worldly situation is, as Dewey puts it, a “*form* or scheme . . . in which meaning and understanding occur” (1925, p. 181). In advancing this view, Dewey challenges the doctrine that conceptual forms are merely nominal and projected onto an inherently meaningless world.
- iii) That perception—especially aesthetic perception—occurs when different sensitivities and capacities coordinate into joint action by synchronizing around objects and events. If we recognize this, we will

realize that contrary to what the old saw says, perception is not easily deceived.

I will develop these various lines of argument with the overarching aim of showing that the philosophical question of how we can ever get outside of private consciousness so as to come to know the world is not as serious a problem as might be supposed. I will also argue that the feeling of being isolated within our own private sphere of subjectivity is symptomatic of a kind of pathology or breakdown. For Dewey, aesthetic experience is the contrary of such breakdown (e.g., 1934, p. 19), and in later chapters of this dissertation—which are dedicated to his work on aesthetics—I address this point.

I recognize that the account offered so far may strike some readers as “mushy” and vague, especially readers committed to Anglo-analytic philosophical traditions. Worse still, it may seem to unwittingly perpetuate the subjectivistic view that the worlds we experience are, as the expression goes, “*mere* constructions of reality.” In the brief space of this introduction, I cannot easily deflect such impressions, though I would point out that all living beings modify and in this sense build their worlds, and this does not in any way diminish the reality of these worlds. I will also make a concession. James was a leading psychologist of his day and his writing was occasionally burdened by a promiscuous use of conventional, psychological vocabulary. While such language can be put to good use, its casual deployment often imposes questionable compartmentalizations on human experience. It also invites vague explanations involving equally vague “psychological processes” on occasions when significantly more concrete explanations are available.

In this respect, Dewey was very different than James. In his mature works, he avoided speaking about psychological states and processes, even when discussing perception, experience and knowledge. He was able to do this largely by virtue of employing a basically Kantian precept. Though Kant inquired into how we cognize things, he was not preoccupied with discovering specific processes that lead to cognition. His chief aim, rather, was to show that regardless of what processes are involved, objects of cognition must be brought into conformity with logic or not be cognized at all. Whereas Kant focused on how logic limits possibilities of intelligible experience, Dewey focused on how possibilities of worldly action set boundaries on how things must be experienced if they are to be experienced at all (see Dewey 1906, pp. 469-475). These limits are factual, not logical. This means there is no set list of limits and that limits can change, though in many cases it is practically certain that they will not. That limits are factual also means that they are delineated by worldly interrelationships—a point that turned out to be crucial to Dewey's anti-sceptical project.

While acknowledging the aforementioned shortcomings in James' work, I still maintain that he successfully challenged empiricistic conceptualizations of experience; that he showed that they lead to confused and hopelessly sceptical theories of knowledge; and that he began to build alternatives to these theories. I ask readers to focus upon this contribution when considering what I have to say about James. I also ask them to remember that Dewey, though only seventeen years younger than James, had the benefit of surviving him by some four decades. This gave Dewey time to learn from James in the twofold sense of building upon his work and learning from his mistakes (see Dewey

1930, pp. 23-26), and in chapters on Dewey, I revisit the ideas of James with an eye to amending some of his missteps.

As is likely evident from what I have said so far, there are a number of things conventionally done in dissertations that I do not do in mine. I do not, to begin with, include an extensive review of contemporary literature on classical pragmatism. In the case of James, I have already explained that I am unable to find scholarly pieces that attend closely and clearly to the issues with which I am concerned, even though I am convinced these issues are centrally important to his work. When it comes to Dewey, I have found one book that resonates with certain core issues addressed in this dissertation, namely, Victor Kestenbaum's (1977) *The Phenomenological Sense of John Dewey: Habit and Meaning*. Following Kestenbaum's example, I occasionally draw support from phenomenologically oriented thinkers such as Maurice Merleau-Ponty, Martin Heidegger, Friedrich Nietzsche and Ludwig Wittgenstein. Yet I do so sparingly and only when it highlights the import of what Dewey was trying to do. Kestenbaum's book, moreover, directed my attention to a number of key passages in which Dewey detailed the relationship between habitual actions, experience and art. Having acknowledged this debt, neither Kestenbaum nor anyone else I have encountered emphasize the radical extent to which Dewey held that hands, feet and other parts of the motor body function as perceptual organs. This is a troubling gap in the literature, for the omission obscures how powerful Dewey's account of perception is, and how fundamentally it departed from most other accounts of its day, with the notable exception of one Merleau-Ponty developed during the last decade of Dewey's life. The omission, as will become evident

later in this dissertation, also obscures how Dewey attempted to answer problems that he identified with both empiricist and rationalist schools.

An additional way in which I break with what is conventionally done in dissertations is that I do not spend much time criticizing classical pragmatists. However, this does not mean I engage with them uncritically. It means, rather, that I accept Collingwood's view (which should be commonplace) that we cannot effectively criticize a thinker if we are unclear on what that thinker intended to say. It also means that while I grant that James and Dewey occasionally advanced questionable ideas, I will focus particularly on those that were uncommonly fruitful in their day, and I will endeavour to show that they remain so today. I will defend the aforementioned ideas by presenting them as clearly as I can and by defending them against misunderstandings. In doing so, I will render a service to critics of classical pragmatists, for the arduous task of getting clear on what pragmatists meant to say is a preliminary step in honest and cogent criticism.

-One-

Sculpting Experiential Worlds: James and his Darwinian Concept of Consciousness

Because James described himself as a “radical empiricist,” and because the Anglo-American tradition is largely hostile to rationalism, many have the impression that James unequivocally opposed rationalists. Yet contrary to his reputation, James explicitly sided with rationalists on certain issues, and reserved some of his harshest criticisms for British empiricists. He particularly criticized empiricists such as Herbert Spencer, who suggested that the world moulds the mind through “...a kind of direct pressure, very much as a seal presses . . . wax into harmony with itself” (James 1880, p. 622). Not only did James reject the tenability of this position; he also showed that it fuels hopelessly sceptical theories of knowledge—a point taken up in the next chapter.

To appreciate how James responded to Spencer, it is important to recognize, first, that Spencer was not only a British empiricist, but also an evolutionary theorist committed to the neo-Lamarckian notion of “direct adaptation” that holds that environmental pressures elicit adaptive variations, as opposed to merely reinforcing them; and, second, that James regarded direct adaptation as an analogue to the British empiricist claim that environmental stimuli mould the mind. Because the Darwinian theory of “indirect adaptation” was an obvious alternative to neo-Lamarckism, and because James equated neo-Lamarckism to British empiricism, he saw Darwinism as a useful weapon in his lifelong fight to remediate empiricism. He co-opted the Darwinian idea that the environment reinforces adaptive variations that arise independently of the

pressures it exerts. He used this idea to explain how certain psychological proclivities emerge independently of environmental stimuli. By doing so, he established grounds upon which he could justify his conviction that we do not passively receive a world that we come upon already existing, but rather experience a world that we help make.

Pre-Darwinism and Darwinism

Charles Darwin and Alfred Russell Wallace, co-founders of evolution by natural selection, were not first to declare that organisms evolve—that idea dates to antiquity. Nor, observed James, were they first to proclaim that the environment preserves adaptive variations, so that, for example, the long neck of “[t]he giraffe . . . is preserved by the fact that there are in his environment tall trees whose leaves he can digest” (1880, p. 622). What they were first to do was to realize the extent to which different forces are responsible for the production and preservation of variations.

On the pre-Darwinian view—by which James primarily meant Jean Baptiste Lamarck filtered through Spencer—environmental pressures that preserve adaptive variations also elicit them: tall trees actually make necks “...long by the constant striving they [arouse] in [the animal] to reach up to them” (1880, p. 622). On the Darwinian view, by contrast, the role of the trees “...is much more that of *selecting* forms . . . than *producing* [them]” (1890ii, p. 636, fn.). Animals are, for reasons independent of the trees, born with varying neck lengths. Those who happen to have longer necks enjoy higher rates of survival and reproduction, and from a “strong principle of inheritance,” as Darwin called it, the variation propagates, thus increasing average length of neck.

Comparing this process to the agricultural practice of selectively breeding for desired traits, Darwin remarked:

...when man is the selecting agent, we clearly see that the two elements of change are distinct; variability is in some manner excited, but it is the will of man which accumulates the variations in certain directions; and it is this latter agency which answers to the survival of the fittest under nature (1872, pp. 129-130).

Darwin, wrote James, discriminated “between causes which [produce a variation] and causes that *maintain* it after it is produced,” an achievement James extolled as “the triumphant originality of Darwin” (1880, p. 622).

James did not offer this complement disinterestedly, however, for he wanted to show that human cognition can fit the environment, and yet, like the neck of the giraffe, not be directly elicited by it. He proposed this on a phylogenetic level and, more innovatively, on an ontogenetic level. In doing so, he claimed to challenge mainstream empiricism, and even to side with the rationalistic psychology of “apriorists”—a position from which he normally distanced himself. No longer, he flatly stated, “...can we believe [the empiricist view] that the coupling of terms within the mind are simple copies of corresponding couplings impressed upon it by the environment” (1890ii, p. 688). “On the whole, then, the account which the apriorists give . . . is that which I defend” (1890ii, p. 618; also see 1878a, p. 897, fn.). In fact, on the whole James did not champion one side over the other; rather, he used the Darwinian concept of “selection” to bridge the two.

Rationalism, Empiricism and Neo-Lamarckism

James (1890ii) drew—in fact, somewhat overdrew—the distinction between rationalist and empiricist psychologies much as commentators today do. By the former he meant the view that the mind has native structure (p. 676); that it grasps certain universal and necessary truths independently of sense experience (p. 661); and that it uses this *a priori* knowledge to actively structure the phenomenal world (p. 619). By the latter he meant the view that simple ideas first enter the mind via sensation, and that these—like atoms bonding into molecules—mechanically adhere into complex ideas in configurations matching “...the order of combination in which [they] were originally awakened by impressions of the external world” (p. 619). James attributed this second view to any number of British empiricists, yet none more so than Spencer, whom he accused of reducing the sentient organism to “absolutely passive clay” upon which the environment impresses its order (1878b, p. 929; 1890i, p. 403).

Spencer was not only a noted British empiricist, but also a prominent 19th century evolutionist. He was friends with both Wallace and T. H. Huxley, “Darwin’s bulldog,” so called for his vociferous defence of natural selection, and it was Spencer who coined the phrase Darwin made famous: “survival of the fittest.” Some of Spencer’s evolutionary writings pre-dated Darwin’s and loosely anticipated natural selection. However, his thought—even his so-called “social Darwinism”—more closely resembled “neo-Lamarckism.” That is to say, it resembled and indeed contributed to a late 19th century reworking of Lamarck that overemphasized his principle of “inheritance of acquired characters,” and abandoned his “cardinal idea that evolution is an active, creative

response by organisms to their felt needs,” describing it instead as an outcome of “direct impositions by impressing environments on the passive organism” (Gould, 1979, p. 77). Recognizing the resonance between this vision of “direct adaptation” and stock empiricist accounts of cognition, Spencer mingled the two into what James called “evolutionary empiricism.”

It is not only the mind, wrote Spencer (1855), that is ordered “in correspondence with the order of phenomena in the environment” (p. 507), but all living activities: a yeast cell reacts “in correspondence with the chemical changes of the elements bathing its surface” (p. 385), a tree “in correspondence with . . . seasons” (p. 413). Thus where earlier British empiricists held that relations between ideas “in” the mind correspond to relations between objects of the “outer” world, Spencer described everything from vegetative processes to muscular and nervous actions on up to human intelligence as an “adjustment of inner to outer relations . . . initiated by the actions of things . . . outside of the organism” (p. 498). To this he added the Lamarckian principle of inheritance of acquired characters, arguing that features impressed upon an organism during its lifetime are in some measure inherited by its progeny. This meant a departure from the classic empiricist tenet that each mind enters the world as a “blank slate.” Even so Spencer’s psychology remained essentially empiricist. As James noted, it retained the core empiricist thesis that each “mind owes its present shape to experience,” only in this case experience included both that “of the individual” and that “of ancestors as well” (1890ii, p. 620).

James questioned inheritance of acquired characters, particularly its applicability to human psychology. In *Brute and Human Intellect* (1878b), he complained that “...we do not observe that children of great travelers get their geography lessons with unusual ease, or that a baby whose ancestors have spoken German will . . . learn Italian any less easily...” (p. 948). In the last chapter of his *Principles of Psychology* (1890ii), written shortly after the neo-Darwinian biologist August Weismann published his famous attacks on Lamarck, James more forcefully declared: “...we have as yet perhaps not one single unequivocal item of positive proof” supporting the Lamarckian mechanism (p. 688). He concluded, therefore, that if humans do come pre-equipped with adaptive psychological endowments, it is likely a legacy of “...congenital variations, ‘accidental’ in the first instance, but then transmitted as a fixed feature of the race” (p. 618).

Even more than he objected to inheritance of acquired characters, James protested direct adaptation and the analogue empiricist claim that experience—here understood as impositions of impressing environments—directly moulds the mind. Impressions, he urged, cannot by themselves determine how the mind relates objects together,

[because e]very phenomenon or so-called fact has an infinity of aspects or properties. Even so simple a fact as a line which you trace in the air may be considered in respect to its form, its length, its direction, and its location. When we reach more complex facts, the number of ways in which we may regard [and consequently relate] them is literally countless (1878b, pp. 921-922).

Supposing, therefore, that experience were “equivalent to the mere presence to the senses of an outward order,” and supposing further that the contents of mind were arranged after this order, then, wrote James, experience would be “utter chaos” and consciousness “a

gray chaotic indiscriminateness, impossible for us even to conceive” (1878b, p. 929; also see 1890i, pp. 402-403). This not being so, he conjectured the mind must have means—for example, organizing principles—with which it attends to certain relations while ignoring others.

In pursuing this conjecture, however, James did not reject British empiricists’ emphasis on experience, but rather their concept of it. Whereas British empiricists tended to conceive of experience as the world imposed through the senses, James regarded it chiefly as that to which the mind consciously attends. “Millions of items,” he wrote, greet the senses, and yet do not “properly enter . . . experience” (1878b, p. 929; 1890i, p. 402). They do not because “...consciousness is at all times primarily *a selecting agency*”; it chooses “...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” (1890i, p. 139). James, in fact, agreed that experience of the world significantly shapes each mind, but with the proviso that each mind is empowered to select what it experiences. “*My experience*,” he declared, “*is what I agree to attend to*. Only those items which I *notice* shape my mind...” (1878b, pp. 929-930; 1890i, p. 402).

James thereby combined the empiricist claim that the world imposes form on the mind with the rationalist claim that the mind imposes form on the world—this, however, with another proviso. Whereas rationalists held that innate knowledge of necessary relations is the template upon which cognition relates content into intelligible forms, James—while tentatively acknowledging a few such *a priori* rational principles (e.g., 1890ii, pp. 661-662)—emphasized another mechanism: selective interest, which he called

“the real *a priori* element in cognition” (1878a, p. 897, fn.). Place different people in the same environment, he wrote, and each will have “selected, out of the same mass of presented objects, those which suited his private interest.” Ask how each “proceeds *rationaly* to connect [objects],” and once again “we find selection . . . to be omnipotent” (1879a, p. 12; 1890i, p. 287). Interests “cooperate with the environment in moulding intelligence” and thus justify both the empiricist emphasis on the environment and the “...refusal of *a priori* schools to admit the mind [is] a pure, passive receptivity” (quoted in Commager, 1950, p. 92).

Here the crucial point of agreement between James’ account of consciousness and the *a priori* account of rationalist psychologists was not that the mind has certain native proclivities, but that factors that are logically prior to or independent of experience shape how the world appears to the mind. This is a subtlety Spencer missed when he suggested his neo-Lamarckian account reconciles *a priori* and empiricist psychologies because it agrees with the former that each mind comes pre-equipped with certain endowments, and yet agrees with the latter that an individual’s mind is nevertheless wholly a product of experience, albeit experience that includes both that of the individual and that of ancestors (see Spencer, 1855, §197). As James pointed out, Spencer’s interpretation not only maintained the basic British empiricist model, but radically extended it to a phylogenetic level. And James, as will soon be seen, countered empiricistic psychology by using a Darwinian line of reasoning to argue that the mind cannot be affected by environmental stimuli unless it first possesses interests and functionally similar sensitivities that make it receptive to the stimuli; that some of these sensitivities must

arise independently of experience; and that these sensitivities are therefore *a priori* elements in cognition that limit what appears to consciousness.

Assimilating the Darwinian Idea of Indirect Adaptation

It was not simply by evoking the concept of “selection” that James appropriated natural selection into his account of consciousness. Rather, it was by using the concept to allow for a separation between that which generates content and that which makes it inhere—a separation he described in two ways. First, he maintained that the environment generates different varieties of sensory content, which selective interests then occlude or reinforce, even “...as to give the least frequent [varieties] far more power to shape our forms of thought than the most frequent ones possess” (1878b, p. 930; 1890i, p. 403). Second, he theorized “that accidental out-births of spontaneous variation in . . . the excessively instable human brain” spawn new ideas, new mental ways of relating things (1880, p. 641; also see 1890ii, p. 636). While many of these new ways “perish through their worthlessness” (1890ii, p. 636), some help us draw useful connections between things in the world and are therefore reinforced. Here the observable world “...is the cause of their *preservation*, not that of their production” (1890ii, p. 636).

James cited the two aforementioned cases as violations of Spencer’s position that the “outer” world determines the whole of our “inner” life. In the first case, interests direct our attention to certain things, and influence how we relate one to another, all of which is to say: “...interests precede the outer relations noticed” (1878a, p. 897, fn.). The second case is similar. New ideas are preserved because they help us draw connections

between things in the “outer” world. So once again, there is a sense in which “...‘inner relations’ are what engender experiences [or ‘outer relations’] here” (1890ii, p. 638).

This view has an analogue in both pre-Darwinian and Darwinian transactional ecology, according to which organisms are not only shaped by the “outer” environment, but are also shapers of it. It aligns, however, more intimately with the transactionalism of the latter than the former, a distinction the contemporary evolutionist, paleontologist and historian of science Stephen Jay Gould elucidated in a 1979 article. “In a classic and recent case,” he wrote,

several species of tits learned to pry the tops off English milk bottles to drink the cream within. One can well imagine a subsequent evolution of bill shape to make the pilferage easier [...]. Is this not Lamarckian in the sense that an active, nongenetic behavioral innovation sets the stage for reinforcing evolution? Doesn’t Darwinism think of the environment as a refining fire and organisms as passive entities before it? (p. 81).

No, Gould answered. Though commentators “...praise Lamarck for emphasizing organisms as creators of their environment,” the scenario with the tits is, in fact,

...thoroughly Darwinian. The tits, in learning to invade the milk bottles, established new selective pressures by altering their own environment. Bills of a different shape will now be favored by natural selection. The new environment does not provoke the tits to manufacture genetic variations directed towards the favored shape. This, and only this, would be Lamarckian (p. 81).

That is to say, while Darwinism and Lamarckism both leave room for the organism and the environment to change one another, only Lamarckism emphasizes the environment’s power to elicit—as opposed to reinforce—heritable, adaptive variations.

In his (1809) *Zoological Philosophy*, Lamarck proposed that simple organisms spontaneously come into being at regular intervals, and that each progressively evolves

through an inbuilt “complexifying” force. Lamarck added, however, that if this progressive tendency were the only factor influencing “...the shape . . . of animals, the growing complexity of organisation [in the taxonomic ladder] would everywhere be regular. But it is not” (p. 69). So he proposed a secondary factor that neo-Lamarckians later made primary: environmental irregularity. Significant “...alterations in the environment of animals lead to great alterations in their needs, and these alterations in their needs necessarily lead to others in their actions” (p. 107). Altered actions, in turn, lead to the increased or decreased use of certain anatomical structures, and this to a corresponding augmentation or deterioration of structures. On the assumption of the heritability of acquired characters, future generations inherit these changes.

Here the environment exerts a “direct” influence, though not in the sense of being unmediated since behavioural responses stand between environmental and anatomical changes. Rather, the influence is direct—or “directed”—in the sense that anatomical variations are preferentially pushed in adaptive directions (Gould 1979, p. 79). It is also direct in the sense that the altered environment belongs to the causal sequence leading to the production of anatomical changes. Darwinian evolution, by contrast, is “indirect.” Variations arise “with no preferred orientation in adaptive directions” (Gould 1979, p. 79), for the environment does not cause and in that sense direct them. Instead, it reinforces or suppresses what has been produced independently of the pressures it exerts.

This Darwinian conception of organism-world transactions informed a two-part argument that James fielded against the empiricist view that the mind is like clay upon which the world impresses its order. He began the argument by stressing the world-

making power of mind. On the basis of interests, ideas and functionally similar mechanisms, the mind works on sense data “very much as a sculptor works on . . . stone” (1890i, p. 288), and thereby “*makes* experience” of the world (1890i, p. 403; also see 1879a, p. 12). Insofar as the aforesaid mechanisms influence action, and actions change the social and physical world, the world-making power of the mind extends to even the material conditions of life (1878a, p. 908). James insisted, therefore, “...that the knower is not simply a mirror . . . passively reflecting an order that he comes upon . . . [already] existing. The knower is an actor,” who registers “[that] which he helps to create” (1878a, p. 908).

However, this first part of James’ two-part argument did not by itself align him with Darwinism. Nor by itself did it threaten environmental determinism. After all, Spencer too had argued that the mind changes conditions of life. He had observed, for example, that the mind introduces technological and social complexities that transform the human world into one that increasingly favours “motor coordination,” “intelligence” and moral “power of self-regulation” over brute prowess (1852, pp. 496-497). And despite this, Spencer’s psychology had remained environmentally deterministic. His neo-Lamarckian stance, which emphasized the environment and downplayed behavioural innovation, implied that world-changing acts of mind are themselves determined by the actions of things outside the organism. The point James wanted to advance, therefore, was not merely that the mind shapes its world, but that it does so using mechanisms that emerge independently of environmental stimuli. This he did by raising a couple counterfactual objections. As already discussed, he protested that if the mind did not

come to the world already equipped with mechanisms that narrow its attention, then experience would be chaos; he further protested that if the environment were the sole shaper of mind, then all sentient beings in a shared environment should eventually develop “an identical mental constitution” (1878a, pp. 929; 1890i, p. 403). Based on thinking that resembled Darwin’s, he rejected this outcome as extremely unlikely.

In pondering variation, Darwin (1859) had noted instances of the same variation arising “...under conditions of life as different as can well be conceived; and, on the other hand, of different varieties being produced . . . under the same conditions” (p. 133). This defying what one would expect if environmental pressures directly elicit variations, he judged that the “...facts show how indirectly the conditions of life must act” (pp. 133-134). Along similar lines, James joked that if the environment exclusively and directly shaped the mind, then dogs bred amongst sculptures,

...ought to become, if time were given, accomplished *connoisseurs* of sculpture. Anyone may judge of the probability of this consummation. Surely an eternity of experience of the statues would leave the dog as inartistic as he was at first, for the lack of an original interest to knit his discriminations on to (1890i, p. 403; also see 1878b, p. 930).

Put another way, dogs could acquire artistic taste, but not solely as a result of environmental stimuli, for the environment can only reach dogs on an aesthetic level if dogs already possess sensitivities—or what James calls “selective interests”—that make them receptive to aesthetic stimulation. Therefore their interests must change before the environment can reinforce an aesthetic appreciation. “Interests,” wrote James, “are an all-essential factor which no writer pretending to give an account of mental evolution has a right to neglect” (1878a, p. 897, fn.).

The view offered here mirrors the Darwinian position that environmental pressures shape only what already exists in some degree. Many evolutionists, for example, now believe that proto-birds possessed feathers for thermoregulation, not flight. However, it so happened that feathers enabled them in some slight degree to exploit aeronautic factors that slow descent, and thus to leap greater distances. Because this behaviour was advantageous, accidental congenital variations that further facilitated it were selectively reinforced. Future generations consequently became increasingly flightworthy. The point, once again, is that Darwinian evolution follows principally from changes in organisms that are reinforced but not caused by environmental pressures. This was also James' point about the dogs: "The interests precede the outer relation noticed" (1878a, p. 897, fn.). Just as creatures cannot be shaped by flight-enabling properties of atmosphere unless they first possess features that exploit such properties, dogs cannot be shaped by aesthetic phenomena unless they first possess interests that make them sensitive to such phenomena.

James directed this argument against conventional British empiricist psychology, as well as neo-Lamarckism. In either case, however, his point was not that the environment is unimportant or unnecessary for mental development, but that it is insufficient. Breaking eggs, he quipped, "...is a necessary condition of [an] omelet. But is it a sufficient condition? Does an omelet appear whenever three eggs are broken?" (1880, p. 634). So he argued of the mind. He noted, for example, that the ancient Greek mind is revered for its versatile intelligence, and it may be "...that such commercial dealings with the world as the geographical Hellas afforded [were] a necessary condition" of its

development. “But if they [were] a sufficient condition, why did not the Phoenicians outstrip the Greeks in intelligence?” They did not, James answered, because an environment cannot “...produce a given type of mind. It can only foster and further certain types fortuitously produced, and thwart and frustrate others” (1880, p. 634).

In the same way that environmental pressures do not solely determine the evolutionary course of a species, environmental stimuli do not solely determine how individual minds develop during the course of a single lifetime. James argued this on the factual grounds that minds do, as a matter of record, adapt to similar environments in a plurality of ways; on the conceptual grounds that environmental stimuli can only shape mental content that already exists in some degree; and on the functional grounds that we, as conscious subjects, “can be efficient at all only by *picking out* what to attend to” (1880, p. 620). On the basis of selective attention, we focus on this or that, but never everything at once. On the same basis, we draw certain connections between things, while suppressing others. To some extent, therefore, we limit what sorts of things appear to us and how these things are put together, meaning we play a role in sculpting our own experiential worlds.

Copernican and Darwinian Revolutions

Unlike pragmatists such as C. S. Peirce, C. I. Lewis and Nelson Goodman, James little appreciated Immanuel Kant’s famous “Copernican revolution,” and was at times flippantly dismissive of it (e.g., 1890ii, p. 275; 1898, p. 1096). However, his knowledge of Kant was scant. So consequently were his remarks about Kant, and they are to be

taken lightly. While his assimilation of Darwinian evolution did, at certain points, break decisively from Kant's Copernican revolution, the two philosophical projects had noteworthy parallels. These breaks and parallels are worth considering, especially if, as Goodman suggested, Kant pioneered a movement that set the stage for pragmatic philosophies of world-making (see 1978, p. x).²

An initial point to note is that the British empiricists provoked both Kant and James. For Kant it was David Hume; for James it was Spencer. Unlike many of his contemporaries, Kant respected Hume enough to recognize that Hume's well-known sceptical conclusions could not be dismissed out of hand. Kant's solution was not to deny the British empiricist position by burying his head in rationalism, but rather to effect a reconciliation between the two philosophical schools. In this regard Kant may be compared to James. By assimilating the Darwinian notion of indirect adaptation into his theory of mind, James was able to agree with empiricists that it is by experience that beliefs are justified, and yet also agree with rationalists that legitimate beliefs can arise independently of experience.

In responding to British empiricists, Kant and James both inverted the way in which western philosophers traditionally look at knowledge. According to Kant, thinkers before him had held that to know objects, "our cognition must conform to the objects"

² In the pages that follow, I summarize claims from the second edition of Kant's *Critique of Pure Reason* that are relevant to issues addressed in this dissertation. No synopsis of Kant could be uncontroversial to anyone familiar with his work and its diverse receptions, but I shall presume—without argument—that readers who have long pondered both of them will recognize my approach as defensible. I shall cite sections of Kant's *Critique* that are of especial weight, giving page numbers of the second edition as republished within the standard German edition of Kant's works, *Kant's Gesammelte Schriften*, edited by the Royal Prussian [later German] Academy of Sciences (Berlin: Georg Reimer [later Walter de Gruyter & Co.], 1900 -).

(Bxvi). Citing difficulties with this approach, Kant explored an alternative possibility, “namely that we can cognize of things *a priori* only what we ourselves have put into them” (Bxviii). In other words, we can only cognize and thus come to know what is brought into conformity with our cognition—a clear inversion of the traditional view just mentioned. Kant described his approach as analogous to that of Nicolaus Copernicus,

...who, when he did not make good progress in the explanation of the celestial motions when he assumed that the entire celestial host revolves around the observer [i.e., the Earth], tried to see if he might not have greater success if he made the [Earth] revolve and left [the Sun and other] stars at rest (Bxvi).

In this sort of case, cognition is not made to conform to the objects, but rather the reverse. The thought that the Sun is at rest literally changes how we must picture the paths of planetary objects if we are to picture them coherently at all. Our cognition thereby pulls objects into an arrangement, makes them appear in conformity with it.

Kant conjectured that the same occurs on a more basic level, arguing that there are *a priori* limits on how the mind can interpret the world, and that people have knowledge and coherent experience only insofar as the world is brought into conformity with these limits (see Bxvi-Bxix). Kant maintained, accordingly, that knowledge and experience are actively constituted by the mind. James advanced an analogous thesis. He maintained, first, that there are “*a priori* element[s] in cognition” (1878a, p. 897, fn.), only where Kant named specific *a priori* forms such as “quality” and “quantity,” James spoke primarily of subjective interests. He maintained, second, that interests and functionally similar mechanisms limit what sorts of things we notice and how we proceed “*rationally* to connect them” (1879a, p. 12; 1890i, p. 287). Similarly to Kant, therefore,

who argued that the mind encounters the world through certain *a priori* structures—that is, structures logically prior to experience of the world—James suggested that “interests precede” our experience of “outer relation[s]” (1878a, p. 897, fn.).

That Kant and James shared this commonality led them to adopt analogous, though by no means identical, approaches to metaphysics—metaphysics being a field concerned with the conditions under which anything can be said to have “reality” at all. Taking a cue from the burgeoning experimental sciences, Kant maintained that reality can only be registered through some sort of active manipulation of it (Bxii-Bxiv)—that the mind not only acts to impose form on reality, thereby reconfiguring it, but that the mind must act so in order to coherently register anything as reality at all. The mind does so, again, by operating within *a priori* limits that dictate how reality—which here means the phenomenal world—is put together, and thus how it shows up to the perceiving, experiencing and thinking mind (B161-B166). This “putting together” is an interpretive act; things are united or synthesized—albeit often automatically and pre-reflectively—by means of *a priori* conceptual forms; and acts by which things are united by means of concepts are, in effect, acts of judgment, that is, acts in which certain affirmations are made about certain things. Kant implied, accordingly, that human experience of reality is necessarily judgmental: any consciously registered reality is always already constituted through interpretive and hence judgmental acts of mind. Kant’s approach to metaphysics, then, was not to start with a theory about how reality is, and from there move to an account about what sorts of judgments can legitimately be made about reality. Rather, he began with the assertion that the human mind is limited to making certain kinds of

judgments, and from there developed a theory about how reality must be for the mind—a theory, that is to say, about the structures to which reality must be made to conform if it is to be registered at all. His approach, therefore, to legitimating metaphysical judgments such as the principle of causality—that is, the judgment that all changes have causes—was not to show that the principle is a fact observed in reality, but that it is a necessary condition of humans experiencing reality as they do. For Kant, this meant that the experiential basis upon which empiricists challenge the principle actually presupposes the principle, thus rendering their refutation self-contradictory (B233-B248).

Where Kant justified certain metaphysical judgments on the basis that they are pre-conditions of having any experience of reality whatever, James justified them on the grounds that they are pre-conditions of particular kinds of experiences. James thus approached metaphysics from the same “inverted” direction as Kant, but understood metaphysical inquiry more narrowly as “nothing but an usually obstinate attempt to think clearly and consistently” about fundamental tenets that underlie a given field of human thought (1890i, p. 145). Put otherwise, he understood the task of metaphysics to be the elucidation of fundamental guiding beliefs that enable certain forms of life activity and therewith certain forms of experience. Oncologists, for example, encounter their world armed with the belief that cancer necessarily has causes. This means that in the same way that a statistician can only account for that which is quantifiable, oncologists can only explain that to which causes can be ascribed. In Kantian terms, oncologic realities can only appear as realities insofar as they conform to the principle of causality. Thus the principle demarcates a boundary beyond which oncologists cannot see—a limit, it might

be said, of the experiential world of oncology. The principle is justified, then, not because oncologists show it to be an observable fact in the realities they encounter, but because it is a precondition of them encountering and dealing practically with the reality of cancer as they do.

A point at which James very noticeably departed from Kant, therefore, was in his refusal to recognize any clear separation between what Kant calls “constitutive” and “regulative” principles. A constitutive principle is one such as the principle of causality, which, for Kant, is a necessary condition of anything appearing coherently to us. Because constitutive principles delimit how things must appear, they also delimit the sorts of objects about which one can have knowledge (B218-B21). A regulative principle, by contrast, is essentially a pragmatic principle (see Axinn 2006, pp. 84-88); it is a guideline for action, a teleological rule “...*for seeking something we desire*” (Axinn 2006, p. 85). A regulative principle does not, on Kant’s account, play a role in constituting how reality appears, and consequently does not postulate the existence of objects about which humans can have knowledge. Kant cited belief in God as an example (B647). The belief guides human action, particularly in moral spheres (B661-663). Yet God, Kant insisted, is not a reality about which one can have genuine knowledge (B667-B670). James agreed that reliable knowledge about God is unavailable; and he agreed that belief in God can only be justified on pragmatic grounds. As will be seen in the next chapter, however, he also held this to be so of causality, especially the principle of causality. Against Kant, furthermore, he suggested that belief in God—indeed, any belief that affects human

actions—is constitutive of human experience, and thus of how reality is experienced by humans.

More broadly, James broke with Kant by extending—and some would say conceptually confusing—the *a priori* to include interests, inclinations and personally held beliefs. Kant tried to show that logical constraints delimit *a priori* how reality must appear to all conscious beings who encounter things under the spatiotemporal conditions that humans do. In calling these constraints “logical,” Kant asserted that they are universal and necessary. In some sense, James recognized that *a priori* constraints limit how reality appears. Yet he suggested that while many of these constraints are necessary, relatively few are universal. That is to say, he suggested many constraints are only *a priori* or necessary in relation to particular purposes and activities and also in relation to particular biological and psychological constitutions (see 1890ii, chap. 28). Thus his task was not really one of establishing logical limits, but of breaking such limits down by denying their universality. As will be seen in the next chapter, this denial contributed to his anti-sceptical project, for a metaphysical judgment about all reality is a negative judgment. Materialism, for example, makes the universal claim that all real objects are physical. More formally, it states that for any x , if x is real, then x is physical ($\Lambda x[Rx \rightarrow Px]$), and this is equivalent to negating the existential claim that there is no x such that x is real and not physical ($\sim \forall x[Rx \wedge \sim Px]$). Thus on a concrete or existential level, the universal statement is a negative or sceptical judgement about certain kinds of reality. By denying the universality of metaphysical judgements, James did not abrogate sceptical judgments, but he did restrict how far we may cast our sceptical nets in a given instance.

Where James fundamentally agreed with Kant, however, and where he arguably amplified one of Kant's profound insights, was in his conviction that we add to reality.

"In point of fact," he wrote, our world

...seems to grow by our mental determinations... Take the 'great bear' or 'dipper' constellation in the heavens. We call it by that name, we count the stars and call them seven, we say they were seven before they were counted, and we say that whether any one had ever noted the fact or not, the dim resemblance to a long-tailed (or long-necked?) animal was always truly there. But what do we mean by this projection into past eternity of recent human ways of thinking? Did an 'absolute' thinker actually do the counting, tell off the stars upon his standing number-tally, and make the bear-comparison [...] Were they explicitly seven, explicitly bear-like, before the human witness came? Surely nothing in the truth of the attributions drives us to think this. They were only implicitly or virtually what we call them, and we human witnesses first explicated them and made them 'real.' A fact virtually pre-exists when every condition of its realization save one is already there. In this case the condition lacking is the act of the counting and comparing mind (1904a, pp. 472-473).

Our judgments, James concluded, change reality; or "[our] judgments at any rate change the character of future reality by the acts to which they lead" (1904a, p. 473).

-Two-

The Right to Believe: Turning Darwinism against Empiricistic Scepticism

James is remembered for challenging empiricistic scepticism about spiritual realities by expounding a more encompassing “radical empiricism” that takes all experiences seriously, including spiritual ones. Strangely he is not much noted for applying the same strategy to Darwinism, yet this was what he did. By extending and assimilating the idea of indirect adaptation into a teleological theory of knowledge, he developed alternatives to confused empiricistic outlooks that compromise not only our “right to believe” in spiritual realities, but our capacity to justify belief in anything whatever.

At first blush, this thesis might seem problematic. It might seem so, to begin with, because Darwin promulgated an anti-teleological concept of nature. Yet this objection fails to appreciate that James grounded his teleological theory of knowledge on the premise that genuine *teloi* or ends only appear when consciousness posits them—a premise he could not have defended, for example, had he accepted Aristotle’s notion that nature is teleological, yet non-conscious and non-deliberative. James thus went out of his way to affirm the anti-teleological side of Darwinism when advancing his own teleological theory (see 1879a, p. 7). A second reason some may doubt that Darwinism significantly influenced his teleological theory of knowledge is that he only occasionally described it in explicitly Darwinian terms. What this misses, however, is that the theory derived from his concept of consciousness as a selecting agency, which clearly has a

Darwinian basis. Also missed is the fact that James had a frontline view of the Darwinian debate during his student years; that he was well versed in Darwinism, having published and lectured on it early in his career; and that threads of his teleological theory appeared as early as 1865 in a piece discussing Wallace, who was himself becoming disenchanted with materialism, and increasingly convinced that certain aspects of humanity exist beyond the reach of brute forces of the physical environment.

James' anti-sceptical project is, in fact, elucidated considerably by recognizing, first, that he used Darwinian thinking to support his thesis that the 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, pp. 544-545); and, second, that he used this thesis to challenge the view that beliefs are "inner relations" that the "outer" world impresses upon the mind. Against this view, he asserted there are cases in which we only register "outer relations" insofar as we already hold beliefs that dispose us to draw certain connections between things. Perhaps more importantly, he suggested that beliefs are regulatory structures around which actions are organized; that actions generate experiences; and that by acting on a belief we sometimes generate experiential support for what was initially believed in the absence of evidence.

Here it is worth repeating that James identified himself as an empiricist, and subscribed to the empiricist position that "[s]ensible objects . . . are either our realities or the tests of our realities. Conceived objects must show sensible *effects* or else be disbelieved" (1889, p. 1038; 1890ii, p. 301). However, James also insisted that the test of a reality—or a belief about reality—is not necessarily its source. In Darwinian terms, he

insisted that empirical verification of a belief is the cause of its preservation, but not necessarily that of its production. He argued that the failure to recognize this led many mainstream empiricists to prematurely reject beliefs that might turn out to be legitimate. He also argued that this failure led mainstream empiricists to perpetuate theories of knowledge that would, if followed consistently, cast doubt on core tenets of science and even what we are wont to regard as relatively straightforward empirical facts. Thus while James' anti-sceptical project has often been characterized as a defence of our "right to believe" in spiritual realities and other "tender-minded" notions, it was actually an attack on and alternative to sceptical theories of knowledge that undermine the basis upon which we can justify belief in anything whatever.

Early roots in Darwinism

Though evolution by natural selection first became public in 1858 when papers by Darwin and Wallace were presented to the Linnean society in London, the theory was not widely noticed until the late 1859 publication of *On the Origin of the Species*. Thus when James entered Lawrence Scientific School at Harvard in 1861, the controversy was relatively new, and he landed in the middle of it. Asa Gray and Louis Agassiz, after all, were both on the Lawrence faculty. The former was probably the leading proponent of Darwinism then in the United States, and the latter was undoubtedly the foremost scientific critic.

It is fitting, then, that James' first two publications—both from his student years—addressed Darwinism. The first (1865a) reviewed a work by T. H. Huxley. In it

James mildly rebuked Huxley's "left wing" (i.e., anti-religious), radical materialism, yet credited him for inquiring into whether humans are, like other species, subject to transmutation (pp. 290-291). The second (1865b) discussed Wallace's 1864 *The Origin of the Human Races*, a work arguing that humans are not subject to natural selection in the same way as other species, for humans are "social," "sympathetic" and intellectually complex. Thus, in the case of humans,

less robust health and vigour than the average does not entail death. . . . Some division of labour takes place; the swiftest hunt, the less active fish, or gather fruits; food is to some extent exchanged or divided. The action of natural selection [on the physical man]³ is therefore checked; the [physically] weaker . . . do not suffer the extreme penalty which falls upon animals so defective (Wallace, quoted in James, pp. 262-263).

Similarly, whereas other species survive changes in the physical environment only by alterations in their own physical structure, humans adapt "...for the most part by [their] intellect alone" (p. 263), for example, by conceiving better tools. Insofar as social and intellectual capacities are more important to survival, and physical constitution less so, human evolution proceeds more on a "moral" and "mental" level than on a physical one (p. 263).

It is not clear whether James, in his mature work, continued to hold that such factors check natural selection on the "physical part of man" so that "[t]he physical part is left immutable" (1865b, p. 263). Crucially, however, James (1878a) did retain the idea that "social affections" and intelligence alter the "survival formula," so that individuals "may survive, even though [they] be ill-adapted to the natural 'outer' environment" (p. 899). Such individuals include "[t]he story-teller, the musician, the theologian" and

others who receive a livelihood in return for satisfying wants of their community—“wants,” James urged, that “are pure social ideals, with nothing outward to correspond to them” (p. 899). In his magnum opus, *The Principles of Psychology*, James (1890i) similarly maintained that human consciousness pursues what is beyond the immediate world of sense experience: “*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*” (1890i p. 8).

His point was that conscious intelligence reacts not only to environmental stimuli. It pursues interests, “...which it *creates*, and which, but for it, would have no status in the realm of being whatever” (1890i, p. 140). It strives towards ideals, which are ideals precisely because they do not correspond to anything in the world as it factually appears (see 1878a, pp. 894-897; 1890i, p. 639). Thus “[e]very actually existing consciousness seems to itself at any rate to be a *fighter for ends*, of which many, but for its presence, would not be ends at all” (1890i, p. 141).

A Pragmatic Challenge to Materialism

Charles Sanders Peirce articulated the first formal pragmatic definition of meaning when he declared that thought-distinctions are never “so fine as to consist in anything but a possible difference of practice” (p. 265) and that “[o]ur idea of anything *is* our idea of its sensible effects” (p. 266). To ascertain the meaning of an idea or concept, therefore, we need only “[c]onsider what effects, which might conceivably have practical

³ James’ addition, not mine.

bearings, we might conceive the object of our conception to have” (p. 266). An object conceptualized as “hard” and “heavy,” for example, means one that might conceivably have the effect of injuring toes upon which it falls.

James (1879b) adopted this view, yet broke somewhat with Peirce by strongly emphasizing the extent to which individual interests decide what effects get attached to objects of conception. “One man conceives [oil] as a combustible, another as a lubricator,” and still another “as a darkener of wood,” he wrote (p. 952). For different people, the object—in this case, oil—is valued and thus noted for producing different effects. James argued, accordingly, that an object’s “essence”—that is, the key set of features that make an object what it is—“varies with the end we have in view” (1879b, p. 952). Hence essence is nothing more than those key properties that are

...so *important for my interests* that in comparison with [them] I may neglect the rest. . . . The properties which are important vary from man to man and from hour to hour. . . . But many objects of daily use—as paper, ink, butter, horse-car—have properties of such constant unwavering importance, and have such stereotyped names, that we end by [erroneously] believing that to conceive them in those ways is to conceive them in the only true way. Those are no truer ways of conceiving them than any others; they are only more important ways, more frequently serviceable ways (1890ii, pp. 335-336).

A concept, James maintained throughout his career, “...is a teleological instrument. It is a partial aspect of a thing which *for our purpose* we regard as its essential aspect...” (1879b, p. 952).

By locating the “[o]rigin of concepts in their utility” (1911, p. 1015), James injected an analogue of natural selection into his theory of concept formation. As he put it, a concept may be considered as “...a ‘spontaneous variation’ in some one’s brain. For

one that proves useful and applicable there are a thousand that perish through their worthlessness” (1890ii, p. 636). However, whereas natural selection measures utility simply as the brute fact that some variations happen to help some organisms survive and propagate, James held that the human mind confronts “...the utility of selection [as] obviously created and measured by [its own] interests...” (1879b, p. 19). Thus it confronts the utility of concepts as a teleological matter involving value judgments about what *teloi* or ends are worth pursuing. One person values art; another not; hence one person has use for aesthetic concepts, while the other does not.

In arguing that subjective interests guide thinking, however, James did not mean that thought is “merely subjective,” “just in one’s head,” “without basis in the world.” Rather, he meant that subjective interests direct attention to realities in the experienceable world that are germane to pursuits that interest the conscious subject; and that they hone conceptual instruments so as to handle and negotiate these realities in fruitful ways. Instead of equating the meaning of concepts to “images in one’s head,” therefore, he equated it primarily to the functions concepts serve in the world of human activities, writing that “...if [concepts] have any use they have that amount of meaning” (1907a, p. 606). James thought this so of relatively concrete concepts such as “circle” and “man,” and even more so of highly abstract ones. “There are concepts,” he observed, in which

...the image-part . . . is so faint that their whole value seems to be functional. ‘God,’ ‘cause,’ ‘number,’ ‘substance,’ ‘soul,’ for example, suggest no definite picture; and their significance seems to consist entirely in their *tendency*, in the further turn which they may give to our action or our thought. We cannot rest in the contemplation of their form, as we can in that of a ‘circle’ or a ‘man’; we must pass beyond (1911, p. 1013).

By advocating a functional or pragmatic reading of such metaphysically charged concepts, James broke with many empirically oriented thinkers before and after him who dismissed some of them as nonsense. Such concepts, he insisted, "...bring new values into our perceptual life, they reanimate our wills, and make our action turn upon new points of emphasis" (1911, p. 1020). Consequently they have discernable effects in our activities, thus also our experience, including sensible experience. Hence they have sense or meaning.

Of course, these concepts also point beyond the immediate perceptual order. Yet this is something James (1911) argued nearly all concepts do. Without concepts, he maintained, "...we should live simply 'getting' each successive moment of experience, as the sessile sea anemone . . . receives whatever nourishment the wash of waves may bring" (p. 1015). But "[w]ith concepts we go in quest of the absent, meet the remote..." (p. 1015); we connect experiences from different times and places, project forward, look behind; we "...string [experiential] items on as many ideal diagrams as our mind can frame" (p. 1015). "All these," wrote James,

are ways of *handling* the perceptual flux and *meeting* distant parts of it; and as far as this primary function of conception goes, we can only conclude it to be . . . a faculty superadded to our barely perceptual consciousness for its use in practically adapting us to a larger environment than that of which brutes take account (pp. 1015-1016).

If we gaze upon unexploited oil sands in Alberta, for example, and ponder the energy, pollution, jobs and political strife stored in them, we conceive of them in terms of interests or ends that exist in the broader human world, but not in sensations received from the current, physical environment. Moreover, the notions we employ—"energy,"

“pollution” and so forth—indicate future consequences the object of conception—in this case, the sands—might have. Thus by emphasizing aspects of the object that are important to our interests, the concept actually postulates future ends—say, greater energy security and a cleaner environment—around which future actions, experiences and worlds are likely to be organized.

This view of concepts played a key role in James’ struggle against materialists, especially those who think science shows that reality is solely made of causally determined physical constituents. Empiricists predating James had questioned the concepts of “matter” and “cause.” George Berkeley challenged the distinction between secondary and primary qualities, and therewith the notion that the phenomenal world depends upon an independently existing material substrate. David Hume noted that we observe successions of events, but never an additional quality of “necessary causal connection” joining them. Under their sway, even Huxley, who James regarded as a radical materialist, granted the materialist position is indemonstrable. Yet he nonetheless advocated that scientists adopt it, and for reasons James could, in fact, respect. As Huxley explained:

All physical science starts from certain postulates. One of them is the objective existence of a material world. . . . Another postulate is the universality of the law of causation; that nothing happens without a cause... The validity of these postulates is a problem of metaphysics; they are neither self-evident nor are they, strictly speaking, demonstrable. The justification of their employment . . . lies in the circumstance that expectations logically based upon them are verified, or, at any rate, not contradicted, whenever they can be tested by experience (1887, pp. 335-336).

James too suggested that these basically pragmatic grounds justify scientists postulating physical and causal realities. However, he denied they justify the stronger claim that all realities are physical and causal—that physicality and causality are essential characters of anything that is. “[T]he whole doctrine of essential characters,” he reminded his readers, “is intimately bound up with a teleological view of the world” (1890ii, p. 336, fn.). Thus if scientists say physicality and causality are essential, they in practice mean essential for scientific purposes.

In fact, Huxley’s use of “physical science” in the above-cited work emphasizes just this point. He used it to connote not just physics, but also chemistry, biology and geology; his use of the term, in other words, coincides with what are today unambiguously considered “sciences,” which is to say, reasonably “hard sciences.” The term “scientist” as a designation for those who investigate material nature was in Huxley’s day a fairly recent linguistic innovation, coined by William Whewell at the prompting of Samuel Coleridge in the 1830s. Before then “science”—from Latin *scientia* for “knowledge”—meant any corpus of “systematic and orderly thinking about a determinate subject-matter” (Collingwood 1940, p. 4). So by using the term “physical science,” Huxley made clear that he was referring to systematic and orderly thinking directed towards a particular end—namely, that of acquiring knowledge about physical processes in nature. Thus Huxley’s metaphysical postulates did not merely state conceptual means by which science pursues its ends; they also indicated ends science pursues. Science pursues physical accounts of observable phenomena, which in most cases means causal accounts. Research procedures and other modes of action that fail to

further this end typically fall outside the cannon of accepted scientific methodology, just as a science that so fails typically ceases to count as a bona fide science (see James, 1896, p. 463). In today's terms it becomes mere "soft science" or no science at all.

The problem, then, that James had with those citing scientific evidence in support of materialism is that science has historically pursued ends that discourage it from affirming anything else. "Science," he wrote, needs to be "...reminded that her purposes are not the only purposes, and that [postulates] which she has use for, . . . may be enveloped in a wider order, on which she has no claims at all" (1890ii, p. 576). His general point—and, in fact, a central point of many pragmatic philosophies—was that particular affirmations do not amount to sweeping negations. To affirm the existence of physical realities is to claim that some physical realities exist, not that nothing other than them exists. However, to the extent that one emphasizes scientific purposes to the exclusion of others, the former claim becomes practically equivalent to the latter. This leads to what James regarded as monistic, "half-way empiricism"—monistic because it acts on the assumption that existence is made of one kind of stuff, namely, physical stuff, and half-way because it prejudicially dismisses experiences (empirical data) that do not square with this assumption (see 1897a, p. 447). Seen thus, scientific affirmations of materialism, though couched in empirical terms, mark a retreat from a genuinely empirical attitude.

James expressed hope that the future would deliver a more radically empirical science (see 1909b, p. 773). "[I]n its essence," he writes, "science only stands for a

method and for no fixed belief” (1897b, p. 698). So although historically engrained habit has tied science to materialistic belief, James held that science might move beyond it.

A Darwinian Challenge to the Concept of Belief as Correspondence

Correspondence theories of truth were targets against which James directed his pragmatic philosophy. He particularly associated them with Spencer’s view that “outer relations” determine how things get related “in” the mind; and that a belief, considered as an “inner relation,” is true inasmuch as it “copies” or “corresponds” to a relation in the “outer” environment (see 1878a, pp. 902-903; 1904a, p. 468).

James suggested, to begin with, that Spencer did not appreciate the epistemological ramifications of his own evolutionary psychology. Again, it was Spencer, not Darwin, who coined the phrase “survival of the fittest”; and if fitness is measured by usefulness to life, it should matter little whether an idea copies the world, so long as it guides people into beneficial interactions (see 1904a, p. 468; 1907a, p. 579). People’s idea about how to get from point A to B, for example, often misrepresents streets as intersecting at right angles. Yet so long as it reliably and efficiently gets them to their destination, few will call it “untrue.”

A second reason James (1890ii) rejected Spencer’s position is that it implied that the most unshakable beliefs should correspond to the most frequently observed “outer relations.” While granting this sometimes occurs, he cited science as a domain where it often does not, arguing that scientists have produced many laws precisely “by ignoring conditions which are always present” (p. 636). Physicists have pondered how bodies

would move over a frictionless surface, or respond to a force as point-like objects; and aided by these ideal objects that are never actually observed, they have noticed fundamental tendencies in nature. This being so, James considered it absurd to think that scientists acquire beliefs (“inner relations”) by merely absorbing salient “outer relations.” He proposed, therefore, just the reverse of Spencer: “Instead of experiences engendering the ‘inner relations,’ the ‘inner relations’ are what engender experiences here” (p. 638). Nascent scientific beliefs sometimes arise in a manner “...akin to that of the flashes of poetry and sallies of wit to which the instable brain-paths equally give rise” (p. 636). Many direct attention where nothing is to be seen, and are consequently abandoned. Others, however, help scientists notice and connect what once seemed unconnected, and are therewith empirically verified. Using Darwinian language to express the point, James wrote that scientific beliefs must, indeed, “...prove their worth by being ‘verified.’ This test, however, is the cause of their *preservation*, not that of their production” (p. 636).

A third objection James raised against Spencer was that observable phenomena relate in myriad ways, so that there is rarely a single “outer relation” to which an “inner relation” ought to correspond (1878b, pp. 921-922). The belief, for example, that the Earth goes around the Sun is not justified by brute correspondence to observed spatial relations. Indeed, if one were to spend a year plotting distances between the Earth and Sun, the observations would correspond equally to the belief that the Sun goes around the Earth—in fact, it does go around the Earth if the latter is regarded relativistically as a

stationary point of reference.⁴ From here one could construct a solar system, in a vein similar to the 16th century astronomer Tycho Brahe, in which the Sun goes around the Earth, and the other planets around the Sun. If updated with elliptical orbits and perihelion shifts, this Tychonic model would faithfully represent the paths of objects in the solar system relative to one another; it would account for why Venus appears largest during its crescent phase, and so on. For all this, however, it would not work nearly so well as the currently favoured Keplerian model does. Whereas the Keplerian model has one centre of motion, the Tychonic is more complicated with two; whereas the former uses the Earth's orbit to account for annually reoccurring displacements and aberrations of stars, the latter must assume stars actually undulate lockstep with the Earth-based year; and whereas the former—or something close to it—meshes with both classical and modern physics, the latter integrates poorly. Of the two models, then, the Keplerian is favoured for what James regards as pragmatic reasons of workability. It is more workable both in terms of its simplicity and in terms of its compatibility with basic physics. It is more efficiently able to make sense of accumulated theoretical and observational experiences about physical nature, and in the context of these experiences easier both to use and to understand.

⁴ This is easily grasped in the following way. Place your right index finger through the hole in a compact disc, and then, while keeping it stationary, move your left index finger around the exterior edge. Next keep your left finger stationary, and use your right to move the edge of the disc around it. Though the spatial relations between the fingers remain the same (in these two cases, everywhere equidistant), the left appears to circle the right in the first case, and the right the left in the second. This reversibility works not just with circles, but also ellipses or any other shape, and it works regardless of the location of the point within the bounded figure.

That many beliefs are not directly elicited by brute facts; and that few, if any, have a one-to-one correspondence with them suggests that strict correspondence is either a useless criterion for truth or a hopelessly sceptical one. There are, in fact, not just two, but an infinite number of possible models that capture the relational order of the solar system, for any arbitrary position can be adopted as a stationary point of reference. If mere correspondence determines truth, then all these models are equally true; and if one-to-one correspondence is the criterion, then all are equally false. Matters are worsened by the fact that we cannot maintain any model without assuming the future will resemble the past; and this assumption, as Hume and others have shown, cannot be affirmed on the basis of correspondence to facts.

For James, the solution was to recognize that correspondence is not the only standard for evaluating beliefs. We have long employed additional criteria such as elegance, economy, sense-making power and fit with other accepted beliefs. These criteria are not evidential, for a belief can satisfy all of them without corresponding to facts. Rather, they are pragmatic. Beliefs that meet these criteria are usually more workable than those that do not. So too, it should be added, are beliefs that fit the evidence—that some pragmatic criteria are not evidential does not mean none are, and James included fit with evidence among his pragmatic criteria. As already intimated, then, we can escape the difficult situation with the models of the solar system if we acknowledge that the legitimacy of beliefs depends more on their overall workability than on their brute correspondence to facts; and as will soon be seen, James maintained that if

we adopt this pragmatic attitude, we acquire a basis not only for legitimating scientific beliefs, but also spiritual ones.

A Pragmatic Account of Belief

James described “belief” as the “mental state or function of cognising reality” (1889, p. 1021; 1890i, p. 301), and “cognition” as an intermediary stage in “what in its totality is a motor phenomenon” (1882, p. 65). He meant by this that cognition, when confronted by some thing or event, is more concerned with the question of “What is to be done?” than the question of “What is that?”—that “[c]ognition . . . is incomplete until discharged in act” (1882, p. 66). Not surprisingly, then, he associated belief with action, arguing that “the test of belief is willingness to act” (1882, p. 70), and that “there is some believing tendency wherever there is willingness to act at all” (1896a, p. 458). He meant not only that action measures strength of belief, but also that belief functions psychologically to facilitate action. When one wavers between contradictory options, unsure of what to believe, one hesitates to act, especially if acting carries weighty consequences. With belief, however, there arrives “...an idea which is inwardly stable, and fills the mind solidly to the exclusion of contradictory ideas. When this is the case, [actions] are apt to follow” (1889, p. 1021; 1890ii, p. 283). On the grounds that beliefs enable and guide action, James proposed that the truth of a belief “is not a stagnant property,” but something that happens through “a process of *valid-action*” (1907a, p. 574), or what we might also call “valid-action.” Belief in atomic particles, for example, has led to scientifically fruitful theorizing and experimentation. Hence it has led scientists to act

in ways that benefit their field. So long as the belief continues to reliably cultivate beneficial or “valid” actions, scientists are apt to continue trusting it.

Based on the intimate connection between action and belief, James further speculated that people, by willing themselves to action, can actually will themselves into a state of belief: “*we need only . . . ACT as if the thing in question were real, and keep acting . . . [so], and it will infallibly end by growing into such a connection with our life that it will become real*” (1890ii, p. 321). Yet James did not mean, as critics charged, that people can capriciously come to believe whatever they want, for they cannot act however they want. Most will find it impossible to act on the belief that they can walk on water; maddening to act on the belief that they can get to Toronto from Montreal by going east; and embarrassing to act on the belief that John A. Macdonald was the first president of the United States. This does not mean beliefs are inevitably correct. Many are not even tested, but merely held through “the negative fact that nothing contradictory . . . comes to interfere” (1907a, p. 579). Yet it does mean, on the one hand, that the world—including everything from the physical world to the world of already existing beliefs—checks certain actions, and therewith certain beliefs; and on the other, that it tends to reinforce any belief that “adapts our life” to a setting (1907a, p. 579), helps “in life’s practical struggles” (1907a, p. 520) and has “value for concrete life” (1907a, pp. 518-519). So while beliefs can turn out to be wrong, people are rarely in a position to believe anything they want about matters that significantly concern them; and while many beliefs are not elicited by and do not correspond to brute facts in the experienceable (i.e., empirical)

world, the experienceable world nevertheless reinforces those that prove valuable to life, and suppresses those that prove positively incompatible (see 1880, p. 634).

Thus when James (1907a) famously (or infamously) observed that beliefs are justified when they “work,” he hastened to add that this “means something extremely difficult” (p. 580). It means choosing beliefs “that mediate between all previous truths and entertain new experiences”; beliefs that “derange common sense and previous belief[s] as little as possible”; and beliefs that “lead to some sensible terminus or other” (pp. 580-581). “To ‘work’ means . . . these things; and the squeeze is so tight that there is little loose play...” (p. 581).

From Belief to Action to Experience

On James’ pragmatic account, beliefs do not merely assert the existence of realities. As instruments of “making sense,” they also create frameworks through which certain orders cohere into appearance—to re-quote James, “‘inner relations’ . . . engender experiences” (1890ii, p. 638). This is seen with the Keplerian model: the belief that the Sun is the approximate centre of the system establishes the Sun as a stationary frame of reference relative to the planets, and this brings into appearance an arrangement of neat, concentric planetary paths. This is also seen with Huxley’s (1887) postulates of science—not just the two already mentioned, but also a third, namely, the principle of uniformity, which holds “...that any of the rules, or so-called ‘laws of nature,’ by which the relation of phenomena is truly defined, is true for all time” (p. 336). Science lives by this last postulate, for it engages in systematic observation and experimentation with the

expressed aim of inducing general rules from particular instances. That which cannot be captured in enduring formulae is of little interest to science; it does not get reported in journals; it does not establish professional reputations, save in cases when it happens to refute a widely accepted theory. To engage in scientific activities, then, is to act on the belief that certain unchanging realities endure the transience of the phenomenal world. Acting on this belief often means studying things in controlled settings; employing experimental designs that isolate the influences of select variables; and using statistical tests to wrench order from untidy heaps of data. It means establishing not just a frame of reference, but a frame of procedural methods or actions that selectively emphasize what is mathematically predictable and experimentally replicable, so engendering experiences that reinforce a vision of nature as well-ordered and rule-governed.

James, in fact, maintained that the “...experiences which are used to prove a scientific truth are for the most part artificial experiences of the laboratory gained after the truth itself has been conjectured” (1890ii, p. 638). By “artificial,” however, he did not mean “unreal.” “Artificial” comes from the Latin words *ars* and *facere*. *Ars* can connote “art,” as in “skill,” “handicraft” or “manner of acting,” and *facere* means “make.” By “artificial experiences,” then, James described “experiences made or created through action.” Thus when he famously declared we can will ourselves into a belief by acting as if the thing in question were real, he did not merely mean we can convince ourselves on a psychological level; he meant also that actions can generate experiences, data and phenomena that support our belief. In science this is easy to see. The use of the proton collider to produce exotic particles is but one example of scientists acting to create

phenomena that support their beliefs. This occurrence is also easy to see in everyday life. A woman who acts on the belief that she is not, after all, too sick to get out of bed for hockey practice actually eliminates a symptom and therewith part of the experiential basis upon which she judged herself to be so very ill in the first place.

Of particular interest to James (1882) were cases in which a person acts on a belief prior to having justification for it, which is to say, acts on faith. “Faith” here meant believing what might well be doubted; “and as the test of belief is willingness to act, one may say that faith is the readiness to act in a cause the prosperous issue of which is not certified to us in advance” (p. 70). Put otherwise, “[f]aith is synonymous with working hypothesis” (p. 73)—“working” in the twofold sense of being unverified and of being a way of working or acting in the world. As a fallibilist, James held that nothing is ever completely certain, and consequently that all belief involves a degree of faith. However, degrees vary radically:

A chemist who conjectures that a certain wall-paper contains arsenic . . . [needs only] faith enough to lead him . . . to put some of it into a hydrogen bottle, [and so find] out by the results of his action whether he was right or wrong. But theories like that of Darwin . . . may exhaust the labors of generations in their corroboration, each tester of [the theory] proceeding in this simple way, that he acts as if it were true, and expects the result to disappoint him if his assumption is false. The longer disappointment is delayed, the stronger grows his faith in his theory (pp. 73-74).

If longer delays correlate with stronger faith, and delayed disappointment merely means observable facts do not refute a belief, then metaphysical belief—which in this case meant belief in what is “beyond the physics,” beyond what can be observed in space and time—should be capable of inspiring unshakable faith. Belief in the divine is a common

example of this. Two others, which James particularly dwelt upon, are the principles of uniformity and causality.

The first of these follows from the idea that nature is lawful, so that things behave according to the same rules regardless of time or place; and this, wrote James (1890ii), is an idea "...that has to be *sought* under and in spite of the most rebellious appearances" (p. 636). After all, for every phenomenon accounted for by an established rule or law, untold others are not. The tendency is to take utterly for granted that these untold others only appear random and inexplicable because their connection to underlying laws is yet undiscovered. On the very basis of what it asserts, however, this belief cannot be based on observation, on what actually appears, for it specifically claims things are other than they appear. Hence James considered belief in the uniformity principle to be "...far more like a religious faith than like assent to a demonstration" (p. 637; also see 1882, p. 71; 1884, pp. 567-568; 1895a, p. 498). He reached a similar conclusion about the principle that all changes have causes, partly because "cause" is one of those previously mentioned concepts he identified as having a weak "image-part." Again, what one concretely perceives are successions of phenomena, with some types consistently preceded and hence "caused" by others. But what the principle and indeed the concept of "cause" inspire is a "...demand for *some* deeper sort of inward connection between phenomena than their merely habitual time-sequence [...]. The word 'cause' is, in short, an altar to an unknown god; an empty pedestal still marking the place of a hoped-for statue" (p. 671; also see 1884, pp. 567-568; 1895a p. 498).

These words were partly drawn from the New Testament, which mentions an altar to an unknown god (Acts 17: 23), and describes faith as "...the assurance of things hoped for, the conviction of things not seen" (Heb 11: 1 RSV), and the use of "hoped for" by both James and the New Testament is instructive. It emphasizes a subjective, emotional impetus in faith, as well as a teleological one. People do not leap chasms when they are indifferent to what is on the other side. Rather, they reserve leaps of faith for what they care about, long for and desire to be real; and in leaping—"leaping" almost always connoting action—they sometimes become actors in realizing the object(ives) of their faith (1909b, pp. 779-780). James (1882) explained this with an example in which life itself hinges upon literally taking a leap. "Suppose," he wrote,

...I am climbing in the Alps, and . . . work myself into a position from which the only escape is by a terrible leap. Being without similar experience, I have no evidence of my ability to perform it successfully; but hope and confidence in myself make me sure I shall not miss my aim, and nerve my feet to execute what without those subjective emotions would perhaps have been impossible. But suppose that, on the contrary, the emotions of fear and mistrust preponderate; [...] why, then I shall hesitate so long that at last, exhausted and trembling, and launching myself in a moment of despair, I miss my foothold and roll into the abyss. In this case, and it is one of an immense class, the part of wisdom clearly is to believe what one desires; for the belief is one of the indispensable preliminary conditions of the realization of its object (pp. 74-75).

Whether by moving mountains or empowering people to leap from them, faith makes things happen. These happenings can constitute evidence for what was initially taken on faith, meaning faith, and more particularly acting on it, sometimes "creates its own verification" (p. 75).

James held that scientists who act on the principles of uniformity and causality go through a process comparable to that of the trapped mountaineer. They too are motivated to believe what they desire; and as individuals pursuing a scientific life, this usually encompasses variants of the two principles. Some, it is true, shy from strict causality;⁵ some replace laws with approximate rules; yet very few operate on the assumption that occurrences are wholly without cause, and the rules describing them prone to change erratically. An oncologist who concludes on weight of overwhelming evidence that a type of cancer spontaneously erupts without cause, or that its causes are not worth mentioning because they never remain the same, will not be praised for contributing to science, but condemned for abandoning the pursuit. Uncounted scientific studies do, in fact, turn up only random data, but these are understood to mean: “you are not looking carefully enough or in the right direction.” This makes evidence against the aforementioned principles practically impossible, for scientists automatically dismiss such evidence as illusory, as non-evidence. What this effectively means is that the principles are deemed true not because of evidence, but regardless of it.

Yet this is not to say the actions of scientists engender no experiential basis whatever for continued faith in the principles. Rather, it is to compare their situation to biblical characters of old, who never come face-to-face with the divine object of their

⁵ Quantum mechanics—with its probabilistic atomic half-lives, Heisenberg’s uncertainty principle and the like—challenges strict causality. I do not, however, attempt to defend James’ position that science overwhelmingly assumes the principle of causality from this counter-example, first, because quantum mechanics only emerged after his death; second, because I intend this work primarily as a historical exegesis, not a defense; and, third, because the principle of causality is, in fact, still alive in most scientific fields.

faith, yet find their willingness to act on faith rewarded. One of the chief rewards, strange to say, is strength to persevere when concrete rewards are withheld (see 1895a, pp. 500-501). When an experiment fails to uncover a generalizable cause-and-effect relationship, more trials are run; and when a lifetime of work fails, other scientists pick up the task, ever confident the phenomenon under study must have a cause and must follow some general rule. Whether or not this confidence will be rewarded in any given instance is a question akin to whether or not a slot machine will pay on the next pull. Over time, however, acting on the principles will intermittently yield results, and therewith experiences that reinforce continued action, all the more so because behaviour rewarded on an unpredictable schedule typically dies hardest—a fact well established by behaviourist psychologists, not to mention gambling addicts. Because these intermittent results could be reached in a universe not completely lawful and causally determined, they do not require what may casually be called the “truth” of the principles. They do, however, depend a great deal upon faith in their truth. Scientific breakthroughs often come only after years of failures. Without faith, scientists might well abandon an inquiry after a few failures on the grounds that the phenomenon under study is perhaps one to which rules and causes do not apply.

In addition to strengthening resolve, faith brings certain world-orders into appearance. One of the earlier cited New Testament passages goes on to say that faith is the understanding “...that the world was created by the word of God, so that what is seen was made out of things which do not appear” (Heb 11: 3 RSV); or as another translation reads, so “that the world which we can see has come into being through principles which

are invisible” (Heb 11: 3 PME). Just so with the principles of uniformity and causality. Each is beyond what can be observed; yet each shapes how the world appears to scientists. The scientific mind often sees nature as fundamentally mathematical, but this “mathematical world-formula,” as James (1890ii) called it, is not “forced on the mind *ab extra*” (p. 667); rather, it is actively pursued as an ideal end. The ideal theory in science is one that holds without exception and predicts outcomes with inexorable accuracy. It is just the sort of theory that can be expressed in the uncompromising terms of mathematics, and just the sort sought by believers in the principles. Not surprisingly, then, scientists focus on quantifiable aspects of the world. More than this, they make the world quantifiable. Using sophisticated laboratory techniques they generate easily quantifiable observations, and using increasingly powerful statistical methods they convert observations into mathematical expressions that are easy to compare, replicate and ultimately generalize into predictive formulae. It is almost to the point where the legitimacy of a scientific theory depends on it having a mathematical basis, and consequently approaching a point where science does not merely observe mathematical realities, but demands them. James claimed there are cases where “[y]our ‘things’ realize all the *consequences* of the names by which you classed them” (p. 666). The situation here is similar. The principles upon which scientists act help realize the world in its mathematical aspect.

Yet if empirical observation neither affirms nor denies the principles, on what basis do scientists act on them in the first place? A very straightforward one, according to James. When alternative positions mesh equally with data, “...we choose between them

for subjective reasons” (1907a, p. 581; also see 1882, p. 59). This happens when we choose the more elegant (aesthetically pleasing) and economic (easier to use) of two otherwise equally compelling positions; and it happens in the case of the principles. Scientists are emotionally committed to maintaining that which sustains their activities. As empirical evidence pushes in neither direction, they act according to their own interests, and act on belief in the principles.

For James, however, it was not merely that we are licensed to choose according to our own emotional inclination when evidence is neutral, but that we *must* so choose. After all, “...to say, under such circumstances, ‘Do not decide, but leave the question open,’ is itself a *passional decision*” (1896, p. 464)—that is, a decision based on inclination, not evidence. If delayed decision does not have significant costs; or if going forward has enormous risks or means sacrificing other cherished beliefs, then delay in the absence of evidence may be the more practical and emotionally appealing option. Yet for scientists the situation is the reverse. Not committing to the principles sacrifices scientific life. Committing, by contrast, does not carry enormous risks—while some scientific activities are risky, the principles do not necessitate these specific activities. Nor does committing necessarily threaten cherished beliefs ostensibly opposed to the principles, for example, James’ cherished belief in freewill. To act on the principles for scientific purposes is to assume, in effect, that phenomena with which science deals tend to be lawful and caused, not that all phenomena are. Under such circumstances, James thought the better “...part of wisdom is clearly to believe what one desires” (1882, p. 75).

Hence James did not object to scientists taking principles on faith. What he objected to, rather, is the “arbitrary caprice” with which some regard this instance of faith as rational, while rejecting others—most notably, religious ones—as irrational (1882, p. 71), for faith plays strikingly similar roles in scientific and religious life. Though the principles are beyond empirical confirmation, scientists generally act on them because doing so is adaptive: the principles fit and make sense of much of the world scientists encounter; they do not conflict with data; acting on them rewards scientists with knowledge; and faith in them gives scientists strength to persevere when phenomena seem jumbled, governed neither by law nor cause. The Gospel of John says whoever believes shall have life (6: 47), and those who believe in the principles secure tools that help them work as scientists and pursue a scientific life. So similarly with religious faith. It “works” for some people: it fits and makes sense of the world they encounter; it does not conflict irrevocably with data, especially if, as many scientists complain, religious belief is unfalsifiable; it enables spiritual enlightenment and spiritual lifestyles; in some cases, it also helps people survive when life is tough and seemingly devoid of divine presence.

A second commonality between scientific and religious faith is that both can function to realize desired object(ives). Faith in the principles often translates into a felt need for mathematical harmonies; and without this “imperious inner demand,” scientists might fail to see

...that such harmonies lie hidden between all the chinks and interstices of the crude natural world. Hardly a law has been established in science, hardly a fact ascertained, which was not first sought after, often with sweat

and blood, to gratify an inner need. Whence such needs come from we do not know: we find them in us, and biological psychology so far only classes them with Darwin's 'accidental variations.' But the inner need of believing that this world of nature is a sign of something more spiritual and eternal than itself is just as strong and authoritative in those who feel it, as the inner need of uniform laws of causation ever can be in a professionally scientific head. The toil of many generations has proved the latter need prophetic. Why *may* not the former one be prophetic, too? And if needs of ours outrun the visible universe, why *may* not that be a sign that an invisible universe is there? What, in short, has authority to debar us from trusting our religious demands? (1895a, p. 498).

Nature hides many of her secrets from those who do not act on the principles, and James argued the divine can do the same to unbelievers. This may happen because their minds are closed, their attention selectively misdirected from signs indicating a divine presence. Or it may be that doubt prevents them from making a personal acquaintance with the divine in the same way that excessive mistrust prevents people from forming social relations (1896, p. 476). But whatever the case, James maintained that in religion, as in science, it can happen that "our faith beforehand in an uncertified result is the only thing that makes the result come true" (1895a, p. 500).

A third commonality between faith in the principles and faith in the divine is that both are, practically speaking, insulated within teleological centres of life. Acting on the principles for the purposes of oncology does not presuppose that all phenomena conform to them, but merely that a subset of physical processes do. And while Christians are monists in the sense of believing one God accounts for all, they are epistemologically—which here means pragmatically—pluralists. In practice they allow that religious forms of know-how are relatively independent from other forms. To be sure, there are notorious instances of religion overstepping its jurisdiction, as when fundamentalists try to abolish

Darwinism from science classes. Yet most fundamentalists visit medical doctors without worrying whether or not the health sciences make use of religious precepts. Most, in short, typically allow scientists to operate without factoring the divine into their equations, and most, moreover, happily partake in the fruits of science.

James did not claim that the foregoing account demonstrates that there are, in fact, lawful and causally determined regions of the universe. Nor did it demonstrate the existence of the divine. Yet his aim was not to demonstrate what actually is, but to articulate a basis upon which people can rationally believe something is. He took for granted that science is largely rational, and in defending people's "right to believe," he drew liberally from scientific methodology that was then emerging. First, he appropriated the scientific tendency to define concepts functionally, so that concepts *mean* sets of operations enacted for particular purposes (see 1907a, pp. 506-508). Second, he adopted the scientific view that theories are never "proved," but merely shown to be consistent with data and existing knowledge. This is another way of stating that theories are generally accepted because they usefully handle data and knowledge (see 1907a, pp. 512 & 569-570); and this, in turn, is a way of saying they are accepted more for their sense-making power than for their brute correspondence to facts. Third, James held to the empiricist tenet that "[s]ensible objects . . . are either our realities or the tests of our realities. Conceived objects must show sensible *effects* or else be disbelieved" (1889, p. 1038; 1890ii, p. 301). His strategy, then, in defending the rationality of religious beliefs was to show that they have functional meaning, sense-making power and some relation to sensible effects.

Religious beliefs meet these conditions, for they entail actions enacted for particular ends and thus have functional meaning (see 1911, p. 1013); they constitute “world-grammars” through which experiences cohere and therefore have sense-making power; and they shape actions, and actions generate sensible effects (see 1911, pp. 1019-1020). As James (1902) elaborated, “I find it hard to believe that principles,” even those that bespeak invisible realities, “can exist which make no difference in facts” (p. 465). In such cases,

...the unseen region in question is not merely ideal, for it produces effects in this world. When we commune with it, ...consequences in the way of conduct follow [...]. But that which produces effects . . . must be termed a reality itself, so I feel as if we had no philosophic excuse for calling the unseen or mystical world unreal (pp. 460-461).

Here it might seem that James was on shaky ground. After all, it is in consequence of subjects’ actions that religious beliefs engender functional meaning, coherence and sensible effects. Hence they seem subjective in a way that scientific facts do not. Yet as pragmatists have generally noted, even scientific facts are produced through actions of subjects. Wave-particle duality in quantum mechanics provides an excellent illustration. If one acts on the belief that an electron is a wave phenomenon, and sets up the detecting apparatus to measure it accordingly, the electron behaves like a wave; the electron is, as far as can be determined, at that moment and from that point of view, a wave. If, however, one acts on the belief that an electron is a particle, and sets up the detecting apparatus accordingly, then the electron is, at that moment and from that point of view, a particle. It is, as one contemporary physicist puts it, as if we have entered an age of “non-objective physics.” Werner Heisenberg developed his “...quantum theory

in the same city and decade in which Kandinsky coined the phrase ‘non-objective art’,” and one may speculate that he “...borrowed from Kandinsky when he called quantum theory ‘non-objective physics.’” Whereas “...classical physics . . . represses the observer and the *act* of observation and talks naively about ‘things as they are’[,] . . . [t]he main idea of quantum theory is to talk about *what you do*, not about ‘things as they are’” (Finkelstein 2003; emphasis added).⁶ Wave-particle duality cogently demonstrates that in science, as in other spheres of life, acts of observation—i.e., actions of subjects—radically affect what shows up. This is not to say, however, that the divine—or for that matter, the principles—can be affirmed in the same way that the existence of electrons can. The point, rather, is that if the subject’s role in engendering meaning, coherence and sensible effects is not *in itself* an objection in experimental science, then neither should it be when it comes to belief in the divine.

The broader point is that the actions beliefs generate—far from making validity “merely subjective”—are one of the primary bases upon which beliefs can be judged valid. As James put it, “...the possession of true thoughts means everywhere the possession of invaluable instruments of action” (1907a, p. 574). Beliefs deemed “valid” are typically those that entail actions that put people into fruitful relations with the world they experience. This can be by generating new experiences that make our world more coherent and manageable, which is to say, liveable; or by helping us negotiate our world

⁶ I am unable to provide a full reference for this quotation. I originally read it on-line, but the paper, which appeared in a 2003 conference, is no longer posted. I have, however, received confirmation from the author, David Finkelstein, that the words I quote are his, though he too is unable to specify the particular source.

both concretely and intellectually, so that we are, as it were, better able to find our way about. For such reasons James described "...truth as something essentially bound up with the way in which one moment in our experience may lead us towards other moments which it will be worth while to have been led to." Truth "...means this function of a *leading that is worth while* [sic]" (1907a, p. 575).

The issue of "worth" invariably leads some to defend the rationality of the principles of uniformity and causality, while denying the rationality of religion on the basis of the following sort of argument: Science, in contrast to religion, has split atoms, cured diseases, built automobiles; hence belief in the principles is more valuable than belief in the divine. The problem is that this makes a value judgment about what ends are worth achieving, but then seemingly fails to note that worth is "relative to the temporary interests of the conceiver" (1879b, p. 952). If a person conceives an automobile to be a greater fruit than spiritual edification, this is because the person is more interested in obtaining a consumer good than a spiritual one.

James speculated that confusions over the issue of worth were, in his own day, compounded by the fact that

...our own day prides itself particularly on its love of Science and Facts and its contempt for all metaphysics. Just weaned from the Sunday-school nurture of its early years, with the taste of the catechism still in its mouth, it is perhaps not surprising that its palate should lack the discrimination and fail to recognize how much of ontology is contained in the "Nature," "Force" and "Necessary Law," how much mysticism in the "Awe," "Progress" and "Loyalty to Truth" or whatever the other phrases may be with which it sweetens its rather meager fare of fragmentary physiology and physics. But its own inconsistency should teach it . . . [of the impossibility of the] suppression of Metaphysics which it aspires to accomplish. Metaphysics of some sort there must be. The only alternative

is between the good Metaphysics of clear-headed Philosophy and the trashy metaphysics of vulgar Positivism (1879b, pp. 976-977).

That metaphysics is unavoidable is a reminder that human beliefs always imply principles that are beyond available evidence. Those who opt for the anti-metaphysical metaphysics of ill-conceived forms of positivism obviously contradict themselves; so too do individuals who disbelieve certain ideas on the grounds that they are metaphysical and therefore unscientific; and by adopting this irrational prejudice, James maintained that these individuals set themselves up to reject—to be sceptical of—what might well be worth believing.

James, Dawkins and the Necessity of Faith

About a century after James published his first Darwin-inspired challenges to empiricistic scepticism, the evolutionist Richard Dawkins published his now famous *The Selfish Gene* (1976). Readers familiar with the last chapter of the book, in which Dawkins developed his theory of “memes,” may notice that he and James arrived at strikingly similar views about how religion propagates, yet reached very different conclusions about its legitimacy: unlike James, Dawkins has dismissed spiritualistic belief as irrational. Pondering these points of agreement and disagreement is worthwhile, for it helps to clarify and articulate the continued relevance of James’ defence of our “right to believe.” It helps, furthermore, to introduce his position that faith is a practical necessity, without which we cannot believe in anything at all, either religious or non-religious; that even scepticism involves a kind of mistrusting faith; and that a mistrusting

attitude is, if all else is equal, less rational than a trusting one. In addition to all this, considering James in the context of Dawkins makes for a convenient segue into the rest of this dissertation. It does because Dawkins has advanced arguments that exemplify the loosely Cartesian—but still widely accepted—view that the mind is a sort of representing machine that generates simulations of the “outer” world. James and especially Dewey challenged this view. So too does the remainder of this dissertation.

Dawkins (1976) coined the term “meme” by melding “gene” with “*mimema*,” Greek for “that which is imitated.” A meme is “a unit of cultural . . . *imitation*” (p. 206), and meme theory is an account of how beliefs, customs and other cultural “units” propagate. It is an account, more specifically, that Dawkins modelled after his “selfish gene” theory, which holds that the “fundamental unit of selection” is not the individual organism, but the gene (p. 12). This means that natural selection does not, strictly speaking, favour a gene because it bestows adaptive advantages on the organism. Rather, it favours any gene good at getting replicated, and this incidentally includes those bestowing advantages. Transferring this precept to beliefs, Dawkins argued that beliefs need not be rational or true to spread, nor serve our interests in any way; they need only have characteristics that induce us to copy and maintain them.

Dawkins has cited Christian belief as a case in point. It comforts believers and thus spreads by dint of “psychological appeal” (1976, p. 207). It eulogizes “faith” and “blind trust” (1976, p. 212), discouraging tests that might undermine it. It equates belief to virtue (2006, p. 199). It peddles the cliché that science cannot adjudicate religious claims, shielding itself from scientific rebuke (2006, pp. 54-61). It threatens doubters

with “ghastly torments” (1976, p. 212), scaring them into belief. It fosters cultural environments that favour its continuation (1976, pp. 212-213; 2006, pp. 197-199). So while Christian belief is, according to Dawkins, fallacious, its characteristics ensure its spread.

Before considering how James might have answered Dawkins, it is well to note that James, while professing vague belief in God (see 1904b), rejected both “popular Christianity” and “scholastic theism” (1902, p. 465). His pragmatism, moreover, was a basis upon which he, like Dawkins, dismissed much of traditional Christian theology as idle hair-splitting (1902, pp. 399-401; cf. Dawkins 2006, pp. 33-34). James, in fact, advanced a surprising number of other points that Dawkins would later repeat.

First, James (1879b) granted that psychological appeal—especially sentimental appeal—induces belief. He added, however, that sentiments (feelings, etc.) can help distinguish between rational and irrational beliefs, and motivate us to seek the former. Inconsistencies obstruct the flow of thought; obstructed thought—like gridlocked traffic—is an irritation we flee; and the transition from inconsistency to “rational comprehension” is marked by feelings of “relief and pleasure” (p. 950). Extreme complexity similarly agitates us, while excessive simplicity bores us, so that we seek parsimony, yet not oversimplification (see pp. 954-956). The point, for James, was that what we call “rational comprehension” is a product of certain of our subjective preferences. That a belief persists because of its psychological appeal, therefore, sometimes means that it persists because it is rational.

Second, James agreed that religion involves faith in things that are not affirmed by what conventionally counts as evidence. Yet this does not translate into a refusal to test beliefs. Strong faith, after all, entails a commitment that has central importance in our life—a commitment, therefore, that affects how we live and act. Actions, in turn, produce experiences that may support but also challenge the practical wisdom of our commitment. Thus having strong faith means testing and even risking it by acting on it.

Third, James did not deny that religious individuals equate belief to virtue, almost as if to justify it on the mere grounds that “believing is the right thing to do.” But this is hardly unique to religion. James noted that one of his contemporaries called “...it ‘guilt’ and ‘sin’ to believe even the truth without ‘scientific evidence’” (1982, p. 71). More crucially, he noted that even our basic concepts—for example, our concepts of what “oil” is—are shaped by what we value. It is, in short, unavoidable that beliefs should rest on value judgments of one sort or another.

Fourth, James (see 1909b, p. 773) shared Dawkins’ impatience with the platitude that science can say nothing about alleged spiritual realities.⁷ However, whereas Dawkins has fingered polite society and religious propaganda as primary progenitors of this platitude, James (1897b) insisted the scientific community shares blame. It ridicules serious discussion of spiritualism, and thus scares scientists from the pursuit (pp. 681-693), much as fear of God scares theists from religious heterodoxy. Scientists also withdraw from spiritual debates by adopting a “half-way” empiricism. For example,

⁷ Some caveats: James is more interested in investigating spiritual phenomena of a psychical nature than of a specifically religious one; and Dawkins does not in practice promote scientific investigations of religious claims, but merely encourages scientists to pass judgment on them.

some presume that reality is exclusively mechanical, and consequently that alleged evidence for non-mechanical realities must always be fallacious (p. 698). This means they hold the presumption not because of evidence, but regardless of it. It further means that if spiritual phenomena are not amenable to mechanistic conceptualizations, then they too will be ignored regardless of evidence (pp. 693-698; cf. Dawkins 2006, pp. 59 & 91).

Fifth, James allowed that religious belief fosters environments that favour its own continuation. Once again, however, this is not unique to religion. Behavioural scientists, for instance, create laboratory environments that pace participants through structured tasks that limit responses to a finite number of discrete possibilities. By doing this, the laboratory environment corrals behaviours into orders that can be mathematically converted into generalizable cause-and-effect relations. By consistently not publishing null (statistically random) results, the academic environment does much the same. James said that “our thoughts determine our acts,” and “acts redetermine the . . . nature of the world” (1909b, p. 774). By acting on faith in the principles of uniformity and causality, scientists nurture environments or worlds that perpetuate their own metaphysics.

When it came finally to developing his thesis that religious believers are delusional, Dawkins, in his (2006) *The God Delusion*, reaffirmed key arguments that James had directed against Spencer’s neo-Lamarckian psychology. He did so, first, by using his meme theory to show that we readily acquire beliefs that do not correspond to “external reality”; and, second, by using Darwinism to emphasize that the brain actively constructs the world rather than passively receiving it (pp. 361-374), which means it can also misconstrue it and thereby suffer delusion (pp. 88-92). That said, Dawkins seemed

to share Spencer's devotion to a psychology organized around an inner-outer divide. He explained that there is "simulation software in the brain" (p. 89), so that "[w]hat we see . . . is not the unvarnished real world but a *model* of [it]" (p. 371) built "inside our head" (p. 361). Perceived hues, for example, are "internal labels" having "no intrinsic connection with lights of particular wavelengths." They are "tools" used to construct a "model of external reality" that tags "important distinctions in the outside world" (p. 373). Dawkins stressed that an animal's "world-representing software" is adapted to its particular "way of life," and speculated, accordingly, "...that bats may 'see' colour with their ears. The world-model that a bat needs," after all, "...must surely be similar to the model that a swallow needs [...]." Granting, therefore, that perceived hues are arbitrary markers, bats may use them "as internal labels for some useful aspect of echoes." "The point," Dawkins wrote, "is that the nature of the model is governed by how it is to be *used* rather than by the sensory modality involved" (p. 372).

For many pragmatically minded thinkers, the point should be rather that perceived qualities are not mere representations "in" the organism, but "...qualities of interactions in which both extra-organic things and organisms partake" (Dewey 1925, p. 259). Thus the quality of "smoothness" includes the way in which a surface allows fingertips to glide over it; it characterizes a "style" of interaction in the world (Merleau-Ponty 1945, p. 315). The point, more generally, is that "[t]he properties of a thing are effects on other 'things': if one removes other 'things,' then a thing has no properties..." (Nietzsche 1967 [c. 1885-1886], §557; also see Peirce 1878, pp. 266-268). The yellow of a lemon, for instance, is a property conditioned not only on the presence of a sensate being, but also on that of light.

The colour even depends on the lemon's relative velocity since light reflected from rapidly approaching objects is "blue shifted," while light from receding objects is "red shifted." Thus even before the perceiver is introduced, it remains true that properties are effects of interrelationships. If properties are effects; if effects count as "real"; and if one does not arbitrarily deem them "unreal" merely because a perceiver participates in an interrelation, then something startling happens. The yellow of the lemon—which Dawkins regards not as a real property but as a way in which the mind represents the object—becomes every bit as real as heat arising as an effect of two objects rubbing. Indeed, it becomes every bit as real as so-called "primary properties" such as length, for as with colour, length varies with an object's velocity relative to the observer.⁸ Indeed, even mass—defined as resistance to acceleration—varies with relative velocity.

For all their emphasis on subjective interests, classical pragmatists resisted the notion that thought and perception are "representations in the subject's head." James shifted the locus of conceptual meaning from an ideational or mental level to that of the actively lived world, and Dewey, as will soon be seen, did much the same for perception. Dawkins (2006), by contrast, has suggested that consciousness is a simulated sphere of inner representation, and thus easily deluded (see pp. 87-92 & 361-374). And as with many who see the brain or mind as a representing machine, he seems to have adopted a correspondence theory of truth very much in the vein of Spencer. He has described the search for "truth" as "a model-building enterprise" (p. 361), and characterized models as

⁸ I am indebted to Evan Cameron of York University for pointing out to me that this feature of relativity theory undermines the distinction between primary and secondary qualities.

internal templates that tag distinctions in the “outer” world. Given that Dawkins has invited us to mistrust our perceptions; given that he seems to have advocated a theory of truth that cannot, for reasons discussed, even affirm a heliocentric model over a geocentric one, much less affirm the principles of uniformity and causality; given, in short, that Dawkins has cast his sceptical net so wide, it is hardly surprising that he has rejected spiritualistic belief as delusional.

James, of course, did not claim to demonstrate that either the principles or spiritualistic claims are true in a straightforward factual sense. He claimed, rather, to establish that in certain world-contexts it is rational to believe they are true. However, from his standpoint—and indeed from a scientific standpoint—this is about as close as one can get to the truth: practically speaking, calling something “true” means it is reasonable to believe it is true. James recognized, moreover, that sceptical empiricists in the vein of Hume would likely see his pragmatic account as further demonstrating the absence of any philosophically sound basis for the beliefs in question. Indeed, while he tried to establish an equivalency between scientific and spiritualistic beliefs in order to increase the range of what it is possible to rationally believe, the strategy might work in either direction. Those who grant both the rationality of scientific belief and the aforesaid equivalency should also grant the rationality of spiritualistic belief. Yet for those who cannot accept the rationality of spiritualism, the equivalency may merely make them sceptical of science.

James’ final response to sceptics, delivered in the last paragraphs of his posthumously published *Some Problems of Philosophy* (1911), was to call upon faith—to

call upon it not merely as an attitude that may be taken, but one that must be. Human life is uncertain. “Its destiny hangs . . . on a lot of *ifs*” (p. 1099), so that “[n]o insurance company can . . . save us from the risks we run...” (p. 1100). In struggling with the question of what kinds of belief we ought to risk in this uninsurable world, James maintained there are four basic attitudes we can adopt:

1. ...[W]ait for evidence; and while waiting, do nothing; or
2. *Mistrust* . . . and, [feeling] sure that the universe will fail, *let* it fail; or
3. *Trust* [...]; and at any rate do *our* best, in spite of the *if*; or, finally,
4. *Flounder*, spending one day in one attitude, another day in another (p. 1100).

James quickly distilled this list to two options. He dismissed the fourth as “no systematic solution,” and collapsed the first attitude into the second on the grounds that the two are practically indistinguishable (p. 1100). The basic choice, therefore, is between *mistrust* and *trust*—a dilemma James articulated by way of analogy. When first we meet other people, we can mistrust them until they demonstrate their worth; or we can trust them until such a time—if it ever comes—that evidence shows them untrustworthy (see pp. 1098-1099; also see 1896, pp. 476-477; 1904a, p. 473). In both cases we act on a belief about other people, even if we do not consciously declare it; and in both cases we initially act in the absence of evidence. Thus in both cases we act on faith, only where the first case “spells faith in failure” (p. 1100), the second spells faith in success. James held, accordingly, that adopting a sceptical position in the absence of evidence still amounts to adopting a belief without evidence, so that even scepticism involves a strange sort of faith (see 1882, pp.85-86). The choice, then, is not between faith and non-faith, but between two varieties of faith: one based on mistrust, the other on trust.

Of these two options, James thought the second wiser. It is wiser because living on trust and believing what we desire is—if all else is equal—the more emotionally fulfilling option. More importantly, it is a path that is likely to bring us closer to truth. Scientists often believe a theory before obtaining compelling evidence for it. Yet by trusting the theory—which here means acting on it—they may generate evidence for it. They may also generate evidence against it. Thus as natural selection works to extinguish maladaptive variations, “[t]he long run of experience may weed out the more foolish faiths. Those who held them will then have failed” (1911, p. 1101), and so much the better, James argued, for this also sets us on a truer path.

James’ answer to sceptics, then, was that their faith in failure is self-fulfilling. By refusing to act on trust, they discard powerful tools by which they might support particular beliefs, acknowledge certain truths and therewith ameliorate scepticism. For this reason, he insisted it is intransigent scepticism—not faith founded on trust—that is irrational. As he put it in *The Will to Believe*: “...a rule of thinking which would absolutely prevent me from acknowledging certain kinds of truth if those kinds of truth were really there would be an irrational rule” (1896, p. 477). By this he did not mean that we should always believe in the absence of evidence. He meant, rather, that there are times when doing so is the better part of practical wisdom, and that if we were to forever refuse to do so, then we would relinquish our capacity to believe anything at all.

-Three-

Art, Experience and Mutual Participation

“*Art*,” as Emerson (1836) put it, is “applied to the mixture” of our “will” with “Nature,” as when we express our will upon natural materials in order to make “a house, a canal, a statue, a picture” (p. 8). While this is a commonplace conception of art, it is one that James—with his notion of the “will to believe,” which he might also have called the “will to make”—would have appreciated. It is also a conception Dewey would have liked, for it hints at the two-sided nature of making. It hints, that is to say, that making occurs within the limits of what we are able to do and what materials allow us to do, and this, in fact, is the basic spirit in which Dewey conceived of experience when he likened it to art.

The human subject is endowed with certain potentialities—that is, with certain capacities and proclivities, both native and acquired. These, in combination with constraints and affordances in the environment of which the subject is a part, limit possibilities of interaction. As Dewey explained, we act “in accordance with [our] own structure” (1920, p. 86), yet also in accordance with “checks, resistances, [and] furtherances” encountered in our environment (1934, p. 147). This does not mean we are forced into specific actions: flexibility is ever present, in addition to which we have some ability to restructure both our environments and ourselves. What it does mean, however, is that we can never act in any manner whatever. There are always limits, and in the same way that selective attention brings order to what would otherwise be chaos, these limits exert a selective influence on what we do and what we undergo in consequence of

our doings. This brings unity and structure to what would otherwise be a disjoint collection of happenings, and this, according to Dewey, forms the basis of what we call “experience.”

Thus where James suggested that interests are regulatory structures around which actions are organized and that interests shape experience by shaping actions, Dewey maintained that experience issues from interactions that are integrated and organized around “structural loci” in the world. “Loci” here refers to “meeting places” where subjects and objects interact; and “structure” refers to a “limiting function” (1925, p. 72), more particularly, to possibilities of action that are limited by what subjects can do and by what objects allow them to do. With this as a guiding principle, Dewey turned modern western notions of experience inside out: he showed that worldly interactions perform work traditionally attributed to inner operations of mind or brain. He showed, furthermore, that pervasive insensitivity to this not only engenders confusions about human experience, but also confused conceptions about what counts as “real.” All of this together promulgates subjectivistic attitudes, even to the point where scientists become unwitting confederates of sceptical philosophers.

Mutual Adaptation

Key to Dewey’s account was the notion that perceptual experiences emerge when our capacities and sensitivities are organized and synchronized around things encountered in the world. In grasping a cold bottle of beer, for example, one encounters a structure that plies the hand to its roundness; a structure that resists the squeeze of the hand, not

giving inward; a structure that cools the hand; and a structure that lets fingertips glide over it without biting into flesh. Consequently one experiences something simultaneously round, hard, cool and smooth. It is in this sense that the bottle becomes a locus around which the hand's sensitivities and capacities coordinate into a particular experience. Almost as dust clings to contours of a surface, action and therewith experience coalesce around the bottle so that various aspects gather into a single form: the bottle.

Understood thus, perceptual experience is an outcome of interacting, of mutual adaptation and participation. It involves an "outward giving" and "giving into," or, as Dewey put it, "an act of the going-out . . . in order to receive" (1934, p. 53; also see pp. 43-44). Again, when we explore the bottle with our hand, the bottle, to borrow from Merleau-Ponty, "...utilizes the time occupied by our tactile exploration or modulates the movement of our hand" (1945, p. 315).⁹ By patterning movement, the bottle patterns a particular experience. Were the hand to instead encounter the contours of a basketball, not only would the patterning of tactile impressions be different, but also the actions of the hand, including the possible positions adopted by it, and through these differences something else would come into appearance, namely, the basketball. Bottles and basketballs select different patterns of activity from among a broader range of potentialities. Through these differences we experience different entities—not only bottles and basketballs, but the hand itself, for perceptual experience of the hand is primarily engendered by the hand's interactions within the world.

⁹ I say that I "borrow" from Merleau-Ponty not only in the sense of appropriating his observations, but also in the sense applying them to my own example. He describes an encounter with a woodcarving, whereas I discuss an encounter with a beer bottle.

That the hand's actions are shaped by entities it encounters does not mean that the hand and, more generally, the human subject simply yield like clay, for they are constrained by their own particular capacities, possibilities of action and form. The subject, as Dewey related, "...brings with it through its own structure, native and acquired, forces that play a part in the interaction." It "...acts as well as undergoes, and its undergoings are not impressions stamped upon an inert wax..." (1934, p. 246). With a seemingly endless array of minute variations and possible combinations of action, and with the particularities of both the individual subject and the things encountered by the subject, possibilities of action are unlimited in number. However, they are not unbounded in scope. Finger bones cannot rotate in knuckle sockets like spinning drills: the subject enters the encounter already endowed with a certain aggregate of potentialities and is consequently incapable of enacting any pattern whatever.

Thus the subject is not a blank-slate; the subject, wrote Dewey, "...does not wait passive and inert for something to impress itself upon it from without" (1920, p. 86). Yet neither does the subject merely "project" perspectives outwards, as if onto an empty screen. While the hand projects itself into an object in the sense of reaching out, touching and pushing into it (see 1917, p. 7), the hand does not, as the expression goes, make the object in its own image. In projecting out the hand meets the countervailing press of the object; it meets resistance; it meets something that limits what actions it can partake in and what positions it can adopt. So, for example, whereas one can roll a beer bottle between one's palms, the same action and hence the same experience is impossible with a cinderblock. In this instance, therefore, it is a misnomer to say that what appears in

experience is *merely subjective*, and the same, as will soon be seen, applies elsewhere. It is a misnomer because the possibilities of action that delimit particular experiences are not *merely* conditioned upon the *subject*, but also upon objects encountered. By the same token, perceived qualities are qualities of interactions that occur in the world, as opposed to mere representations of it.

Hitherto the bottle (the “object”) and the hand (the “subject”) have been described as “structures.” Yet this is somewhat misleading. It creates the impression that the bottle and hand are fully defined prior to any interaction, when the point of the forgoing discussion is to show that the forms and structures that appear in experience are constituted through interactions which are themselves delimited by certain structural boundaries, that is, by possibilities of action. The point, in effect, is to show that the bottle and hand are “media” through which various forms and structures come into appearance. Just as the bottle and hand set bounds on what sorts of actions are possible, different artistic media afford different possibilities of usage so that, for example, Michelangelo’s *David* cannot be rendered symphonically in sound and Beethoven’s *Symphony No. 9* cannot be sculpted in marble.¹⁰ In the same way that the bottle and hand come into appearance through the fulfillment of certain possibilities of action, the artist brings compositions into appearance by working the potentialities of his or her respective medium.

¹⁰ Yes, there are senses in which one might interpret a work of art through an alternative medium—for example, Richard Strauss renders Nietzsche’s *Thus Spoke Zarathustra* in music and Emily Carr paints the woodcarvings of the Haida. Yet this hardly refutes the above claim. Strauss’ symphonic poem and Nietzsche’s *Zarathustra* cannot be substituted for one another, and excepting cases of pathology, no one mistakes Carr’s paintings for woodcarvings.

A medium, however, is not only something that is “worked,” but something that “holds,” “suspends,” “carries” and “conveys.” Perhaps more than anything, it is something that “mediates” (Dewey 1934, p. 200), that is, “transforms,” “converts” and “relates.” Sound, for example, is mechanical vibrations converted through an atmospheric medium into cycles of compression and rarefaction, which are conducted through the same medium to the listener. The hand and bottle might be understood in a similar light. Caressing one’s fingertips over the bottle, one actualizes potentialities of movement afforded by both the bottle and the hand, and in doing so one experiences, among other things, the glassy smoothness of the bottle. The smoothness is a property that appears through a conversion—a conversion, for example, in which certain affordances of the bottle translate into fingertips gliding easily in circular motions. Through this conversion and various others, a round, hard, cool and smooth form becomes manifest. Yet this is not all. In pressing into the bottle, one feels the soft padding of the palm and the less forgiving skeletal structure beneath; one experiences the dexterity of the fingers, their capacity to manipulate things, their sensitivity to temperature, texture and pressure. The interaction, in short, reveals not only the bottle, but also that fleshy, fingered form we call the hand. The bottle and the hand realize one another. They make one another manifest. They mediate one another into appearance. This same basic pattern follows regardless of whether the hand meets a bottle, a pencil, other parts of the body or even the hand itself, as when fingertips of a clenched fist press into the palm.

Dewey (1934) wrote that a medium, when artistically employed, “is a vehicle which becomes one with what it carries; it coalesces with what it conveys” (p. 199). This

also characterizes the medial relationship between the hand and bottle. The glassy smoothness, for instance, is a property of the bottle; yet in the current context it is inseparable from the movements of the hand, save analytically. To be sure, the property belongs to the object: both conceptually and phenomenologically it is the bottle—not the hand—that is glassy smooth. However, as friction is a phenomenon that shows up as a consequence of materials rubbing, so it is with glassy smoothness: it is a consequence undergone in the course of an interaction—a consequence undergone when fingertips glide over a surface that does not bite into flesh. “We speak of perception *and* its object,” wrote Dewey. “But perception and *its* object are built up and completed in one and the same continuing operation” (p. 177).

Here one almost wants to plead that the bottle *really is smooth*, and not just when we touch it—we can see its smoothness, for example. True enough, the bottle really is smooth, and we can, indeed, see its smoothness. However, this is still to say that the bottle really is smooth within the context of particular interactions—or, to put it another way, that the smoothness is an effect of particular kinds of encounters, and the effect is real. It is through manipulation that properties of the bottle come into appearance. This is even so when the bottle meets the eye. The cornea, for instance, modifies the path of light reflected from the bottle; the lens modifies it further by adjusting to bring the bottle into focus; and modification of this sort is manipulation—or as Emerson put it, a “mutual action of [the eye’s] structure and of the laws of light” (1836, p. 14). Dewey made this basic point when he wrote that, while an astronomer “...cannot change the stars themselves, he can at least by lens and prism change their light as it reaches the earth; he

can lay traps for discovering changes [and therewith properties] that would otherwise escape notice” (1920, p. 113).

Some might object this sort of modification is elementary, almost trivial. Dewey would have agreed (see 1934 p. 122). He would have added, however, that when we see the bottle, “[i]t is not just the visual apparatus” that becomes active, “but the whole organism” (1934, p. 122). Though researchers isolate “...the optical apparatus . . . in anatomical dissection, it never *functions* in isolation. It operates in connection with the hand in reaching for things and in exploring their surface, in guiding manipulation of things, in directing locomotion” (1934, p. 100). The sight of beer in an ice filled cooler invites the outstretch of arms, grasping of bottles, twisting of caps, opening of mouths, tilting of heads, gulping of throats and more besides. It is true that we sometimes look without reaching and grabbing. Yet it is also true that we spend most of our waking life handling and ambulating, which means coordinating actions around objects and settings; and true, moreover, that our eyes participate in most of this. They and other modalities work in concert with motor capacities, as when a jabbering chipmunk beckons us to turn our head and gaze; or when legs, feet, arms and hands collaboratively work the pedals and steering wheel of a car so as to keep it on the road seen ahead. When we unlock doors, stroll on sidewalks, count change, eat lunch, flip through magazines, work on computers, sign bills and engage in countless other tasks, “[m]otor and sensory structure form a single apparatus and effect a single function” (1934, p. 255). Therewith our eyes enter into overall mobilizations of actions that coordinate around the contours of environments and things encountered in them.

This does not obviate the fact that we sometimes look without overtly acting, but it does show that our eyes—like our hands—are vehicles for action, even if we happen to be sedentary at a given moment. According to Dewey (1934), moreover, it indicates that when the eyes are not deployed in overt action, seeing is still “an affair of readiness on the part of motor equipment” (p. 98). Thus when we see the form of a beer bottle, we see something we can handle. When we see the layout of a room, we see a space we can move through. When we see contour, shape, line and other qualities, we see “...the ways in which things act upon one another and upon us; the ways in which, when objects act together, they reinforce and interfere” (pp. 100-101). Seeing means, among other things, perceiving what sorts of conduct an environment and things within it allow and disallow.

If all this sounds merely speculative, consider what would happen if we did not see bottles as graspable, rooms as traversable, walls as obstacles and so forth. We would bump about and bumble, and were the condition extreme enough, we would be functionally blind. It is for such reasons that Dewey insisted that “seeing involves the cooperation of motor elements” (1934, p. 53), and the same can be said of other sensory modalities. Consider how we hear distance and movement, and accordingly make way for a rearward-approaching car. Or consider the emotive side of perception, and how *emotion* can literally move us. The hateful, vile, offensive and odious stench of carrion repels and repulses us, makes us recoil and pull away. Our perception of carrion is not defined merely by the sensory excitations it elicits, nor even by the ways in which we cognize them. It is defined also by the fact that we usually keep it at a distance, which is to say, defined by actions in the world.

Thus whereas British empiricists basically regarded perception as an outcome of environmental stimuli impacting us, Dewey regarded it as both an outcome of what we do to the environment and what it does to us, which often meant as an outcome of how it acts on us in consequence of actions we perform on it. For related reasons, he also rejected the empiricistic conception of sensations as individual “atomic units” out of which knowledge is composed. “Sensations,” he wrote,

are not parts of any knowledge [...]. They are rather provocations, incitements, challenges to an act of inquiry which is to terminate in knowledge. . . . As interruptions, they raise the questions: What does this shock mean? What is happening? What is the matter? How is my relation to the environment disturbed? What should be done about it? How shall I alter my course of action to meet the change that has taken place in the surroundings? (1920, pp. 89-90).

Dewey (1929b) pointed out that we do not, as a matter of record, come to know the world by observing it from a static position, but rather by interacting with it, by introducing changes to it, by looking around corners, picking up things, prodding, hefting and otherwise altering the conditions under which we observe them (see p. 87). “Sensory qualities are important,” but chiefly as provocations to action and as “consequences of acts intentionally performed” (p. 112).

Unlike the British empiricist school, wrote Dewey (1920), the opposing rationalist school at least denied “that sensations as such are true elements of knowledge” (p. 89). Rationalists also attended more to the fact that we bring certain structures to bear upon things, thereby working and arranging them into intelligible orders. Dewey complained, however, that rationalists overemphasized the mental side of all this. They did so either by regarding the aforesaid structures as innate features of mind or by regarding them as

logical limits to which things must be made to conform if they are to be cognizable. It is not that these positions were necessarily wrong. The problem, rather, was that rationalists failed to appreciate that “[e]xperience carries principles of connection and organization within itself” by virtue of arising out of “adaptive courses of action, habits, active functions, connections of doing and undergoing” and “sensori-motor coordinations” (p. 91). Indeed, wrote Dewey, “[s]ome degree of organization is indispensable to even . . . an amoeba” (p. 91). It must interact with its environment, else perish; yet it cannot do so any way whatever. Its powers of locomotion, its capacity to move materials in and out of itself, its shape and size all limit its possibilities of action. So too do the materials it encounters. Consequently its activity has “organization,” “continuity in time” and “reference to its surroundings” (p. 91).

That the amoeba’s activity has these commonalities with what we call “experience” does not mean that the amoeba enjoys traces of conscious life. This way of thinking, quipped Dewey, would be akin to concluding that because plows “...originated from some pre-existing natural production, say a crooked root or forked branch, the latter was inherently and antecedently engaged in plowing” (1925, p. 282). What the example does show, however, is that long before human experience arrives on the scene, conditions for coherent experience are already present by virtue of the fact that possibilities of action are limited by what organisms can do and by what environments allow them to do. With the arrival of human experience, new factors become involved. Dewey’s intention was not to deny this, but to stress whatever else experience involves, “[t]he first great consideration is that life goes on in an environment; not merely *in* it but

because of it, through interaction with it. No creature lives merely under its skin” (1934, p. 13).

To Dewey, this was patently obvious, and he occasionally apologized for emphasizing it. Yet he justified the emphasis on the grounds that many do speak as if experience goes on “merely under our skin.” A case in point is the tendency to characterize sense organs as “receptors,” while failing to emphasize that they are also vehicles through which we act. This perpetuates the view that perception is a matter of receiving the world, against which Dewey insisted “[p]erception is an act of . . . going-out . . . in order to receive” (1934, p. 53). This is so because perception is emphatically structured around actions in the world. It is so in the obvious sense that what we perceive relates to what we do and where we go, and also in the more nuanced sense that our perceptual faculties mobilize jointly with our motor capacities. As illustrated by a range of examples, this means that our perceptual capacities and therewith our experiences coordinate around objects in the same concrete manner that our hand coordinates around the bottle—“the same concrete manner” because perceptual faculties and motor capacities synchronize into joint action. Since these coordinations occur through us acting on the world and it pushing back, it follows that perception is an act of going out in order to receive. Even in periods of relative inactivity, our perception is still structured around actions in the world, for insofar as we perceive at all, we perceive possibilities of action that conform to our actual experience of acting in the world. If we do not perceive things so; if we fail, for example, to perceive walls as obstacles, bottles as graspable and so forth, then we do not really perceive at all.

On this basis, Dewey concluded that all perception entails a thoroughgoing integration of subject and object, a mutual shaping or acting of each upon the other. By means of this conclusion, he generalized anti-sceptical implications that I earlier drew from the example of the hand meeting the bottle. He softened the subject-object divide—a divide that fuels scepticism when overdrawn. He showed that perception is emphatically a product of actions in the world and hence never an exclusively “inner” process. He challenged the view that perception is an arbitrary projection imposed on the world, for worlds do not allow us to act in completely arbitrary ways. Though unfamiliar with Dewey, Merleau-Ponty (1945) provided a good summary of all this when he wrote:

The sensor and the sensible do not stand in relation to each other as two mutually exclusive terms, and sensation is not an invasion of the sensor by the sensible. It is my gaze which subtends colour, and the movement of my hand which subtends the object’s form, or rather my gaze pairs off with colour, and my hand with hardness or softness, and in this transaction between the subject of sensation and the sensible it cannot be held that one acts while the other suffers action, or that one confers significance on the other (p. 214).

Outside of encounters in which the subject and object integrate with and mutually adapt to one another—“[a]part from the probing of my eye or my hand, and before my body synchronizes with [the object]”—the sensible object is a “beckoning” (p. 214), which is to say, an invitation to actualize available possibilities. In the words of Dewey (1920), “[i]t is clue in behavior, a directive factor in adaptation of life in its surroundings” (p. 87). “It is an invitation and inducement to act in a needed way” (p. 87)—“needed” because there are always limits; we cannot act in anyway whatever.

An additional conclusion that Dewey drew from the foregoing account is that perception is inherently meaningful. He arrived at this conclusion through an array of interrelated observations and interpretations. Though later chapters address all this, it is worth pausing upon the following point: that possibilities of action relate to use and value. An expanse of space, for instance, not only has numerically measurable values, but also a value for doing or not doing certain things. It has, in other words, use-values. Examples like this are everywhere around us. Dewey understood meaning in a variety of ways, some linguistic, some not; yet most of his accounts related meaning to value and use, albeit “use” never understood as “mere expedience.” Assuming that his basic account is correct, it follows that we can perceive meanings in a situation by virtue of perceiving possibilities of action or use-value. Moreover, if the account is correct, the meanings are not “merely subjective.” They are, to be sure, partly conditioned on subjects since subjects and objects jointly delimit possibilities of action. Yet to conclude that possibilities of action and therewith meanings become “merely subjective” when we arrive on the scene is equivalent to concluding that the contents of a kitchen become mere imaginings when a new table arrives. The arrival of the table changes possibilities of action. Our arrival does the same. The possibilities of action are no less objective for all this.

Systems of Activity

“In art, as in nature and in life,” wrote Dewey (1934), there are “pushes and pulls,” “contractions and expansions” (p. 134). In an individual work of art, “each step

forward is at the same time a summing up and fulfillment of what precedes” (p. 172). In music, “[a] pause . . . is not a blank, but is a rhythmic silence that punctuates what is done while at the same time it conveys an impulsion forward, instead of arresting at the point which it defines” (p. 172). Perceiving art aesthetically similarly builds upon a consolidated base of lived experience. Those with no experience of Western musical traditions often struggle to enjoy and make sense of contemporary jazz innovations; yet so too do those obsessively fixated on past traditions of the West. Thus while a consolidated base of experience (i.e., limits) facilitates aesthetic perception, an utterly petrified base—a base, therefore, which cannot be expanded and recast to embrace new innovations—arrests it. Dewey summarized this tenet when he wrote: “...in order to perceive esthetically, [one] must remake his past experiences so that they can enter integrally into a new pattern. He cannot dismiss his past experiences nor can he dwell among them as they have been in the past” (p. 138).

Dewey (1908) characterized the activities of inquiring and pursuing knowledge in similar terms. “To maintain, to expand, adequate function is [the] business” of life, he wrote (p. 48); and “...the business of organic adaptation involved in all knowing [is] to make a *certain* difference in reality...” (p. 47). Living and knowing both involve “...co-operative and readjusted changes in the cosmic medium” (p. 48). Here Dewey’s use of the word “cosmic” corresponded roughly to the ancient Greek word *kosmos*, which might be translated as “orderly arrangement” or “system,” and his statement expressed what physicists of his day had just come to recognize: that illuminating a system so that it can be seen and known actually disturbs the system. In quantum physics this is emphatically

so, for as Dewey (1929b) noted, at least one photon of light "...is required to make, say, an electron visible," and the collision between the photon and the electron "...displaces to some extent the object observed" (p. 204). The lesson Dewey took from this is that knowing—like experience—is a "...kind of interaction that goes on within the world" (pp. 204-205), so that "[w]hat is known is seen to be a product in which the act of observation," which is an act of rearrangement, "plays a necessary role" (p. 204).

In this regard, quantum mechanics is almost commonsensical, for we frequently act on the precept that we observe things by changing or manipulating them. After all, wrote Dewey (1929b),

[w]hen we are trying to make out the nature of a confused and unfamiliar object, we [often] perform various acts with a view to establishing a new relationship to it, such as will bring to light qualities which will aid in understanding it. We turn it over, bring it into a better light, rattle and shake it, thump, push and press it, and so on (p. 87).

Or if we cannot directly jostle an object, we "deliberately alter the conditions under which we observe [it], which is the same thing in principle..." (p. 84). In either case, "...the intent . . . is to make changes which will elicit some previously unperceived qualities, and by varying conditions of perception shake loose some property which as it stands blinds or misleads us" (p. 87). Thus inquiring—like perceiving—is an act of going out in order to receive. This means, on the one hand, that we garner observations from the world in return for acting upon it; and, on the other, that what we receive is of little worth when we fail to act within certain limits. If we use ill-suited instruments; if we ignore constraints of materials; if we bang about randomly, we elicit a series of

observable effects, but the relationship between them will likely appear haphazard and meaningless.

These points reiterate Dewey's basic rationale for characterizing "knowing" in terms of art and building. Carpentry is an art, and a carpenter a builder, and what makes someone a builder, according to Dewey (1920), "...is the fact that he notes things not just as objects in themselves, but with reference to what he wants to do to them and with them; to the end he has in mind" (pp. 114-115). Put another way, the end the carpenter has in view and the objects he encounters limit possibilities of action. The end, if it is to be achieved, limits what materials can be used; and the materials used limit how the carpenter can deploy his skills. Consequently the carpenter acquires the habit of seeing things in terms of possible uses:

Fitness to effect certain special changes that he wishes to see accomplished is what concerns him in the wood and stone and iron which he observes. His attention is directed to the changes they undergo and the changes they make other things undergo so that he may select that combination of changes which will yield him his desired result (p. 115).

So, for example, when the carpenter calls pine "a soft wood," he indicates that it easy to sand and hammer nails into, but also easy to scratch and thus not appropriate for kitchen floors. From his standpoint, things and their properties "...are what they can do and what can be done with them" (p. 115), and "[i]t is only by . . . processes of active manipulation of things in order to realize his purpose that he discovers what the properties of things are" (p. 115).

Note that in these various examples properties appear not only in consequence of what the subject does, but in consequence of "changes [things] make other things

undergo” (Dewey 1920, p. 115). Dewey’s point, therefore, was one mentioned in the previous chapter: that properties of things are effects of relationships. C. S. Peirce (1878) illustrated this idea when he asked what it means to call an object “hard,” and answered that it means that most other substances will not have the effect of scratching its surface. “The whole conception of this quality [or property of hardness] . . . lies in its conceived effects” (p. 266). C. I. Lewis expressed the idea more generally when he remarked that “[a]ny appearance of an object is conditioned also on other objects” (1929b, p. 286). Or, to re-quote Nietzsche, “[t]he properties of a thing are effects on other ‘things’: if one removes other ‘things,’ then a thing has no properties...” (1967 [c. 1885-1886], §557; also see Dewey, 1908, pp. 45-46). This is to say, once again, that the distinction between so-called “secondary” properties such as colour and “primary” ones such as length and mass is misleading, for as seen in the previous chapter, the colour, length and mass of an object all depend on the object’s velocity *relative* to the observer. In other words, all are effects of *relationships*.

It is with something like this in mind that Dewey insisted that perceived qualities are not mere representations “in” the sensate organism. They are “...never . . . ‘in’ the organism at all,” he wrote; “they [are] always . . . qualities [or effects] of interactions in which both extra-organic things and organisms partake” (1925, p. 259). Thus, as Dewey (1908) elaborated in another work, qualities such as “red, or far and near or hard and soft, or big and little” are undeniably relative (p. 45). They are so, however, in the literal sense that they involve “a relation between organism and environment,” and this is no basis for “proclamations of the agnostic ‘relativity’ of knowledge” (p. 45). Instead, it is

“...an argument for the ultimately practical value of distinctions” (p. 45). This means “they are *differences* made in what things would have been without organic behavior—differences made not by ‘consciousness’ or ‘mind,’ but by the organism as the active center of a system of activities” (p. 45).

The combination of this system of activities and the active organism can be thought of as a situation. If we are in a kitchen, our situation includes us, and likely such things as floors, walls, chairs, counters, sink and stove, and perhaps also a cat sniffing at our feet. These constituents delineate possibilities of action and organization. If we remove, say, the table, then we can traverse the space it once occupied, but we cannot lean our elbows where we once did; nor can the tablecloth continue to rest a metre-and-a-half above the floor as it once did. Limits also vary depending on the active centre. The cat is one such centre; a person another. Because the two come to the kitchen equipped with different capacities, they confront different constraints: they are faced, as the expression goes, with different situations. We can imagine, therefore, that they perceive their situations differently, yet “perceiving situations differently” is here equivalent to “perceiving objectively different situations.” It is equivalent because the cat and person face objectively different constraints—they, like the table and sink, are able to do different things. It is no mere variation in mental outlook that differentiates the perceptual experience of sipping a glass of milk from that of lapping from a dish while on all fours. It is a difference in action. If the person caresses a table leg while the cat sharpens its claws on it, they perform different actions, and different actions, in turn, realize different properties as effects. Easy sweeps of fingertips realize a smooth lacquered finish, while

the cat's claws realize the sinewy toughness of wood, all of which is to say: perception is pre-eminently a matter of acting and making differences in the world, as opposed to merely representing it.

Rather astonishingly, some have advanced the reverse of this position by citing observations that actually affirm it. Dawkins, for example, in a chapter dedicated largely to establishing that perception consists of simulacra, informed his readers that

Science has taught us, against all evolved intuition, that apparently solid things like crystals and rocks are really composed almost entirely of empty space. . . . So why do rocks look and feel solid and hard and impenetrable? . . . Our brains have evolved to help our bodies find their way around the world on the scale at which those bodies operate. We never evolved to navigate the world of atoms. If we had, our brains probably *would* perceive rocks as full of empty space. Rocks feel hard and impenetrable to our hands because our hands can't penetrate them. The reason they can't penetrate them is unconnected with the sizes and separations of the particles that constitute matter. Instead, it has to do with the force fields that are associated with those widely spaced particles in 'solid' matter (2006, p. 268).

From Dewey's standpoint, this passage mostly reduces to the claim that our perception reflects the situation we objectively find ourselves in, and if we were to find ourselves in another (or evolve in it), our perception would reflect that situation. Thus, for example, we perceive the beer bottle as impenetrable because our hands cannot penetrate it. In this particular situation or relationship, the bottle *is*, objectively speaking, impenetrable. Moreover, we do not merely perceive it so because an "evolved intuition" disposes us to represent it this way. If the rules of physics suddenly change so that our hand passes through the bottle, we will perceive this too. So shall it be that actions in the world trump "mental representations." Indeed, it is largely by acting on materials in the world—by

altering the situations in which they are observed—that scientists have reached the conclusions Dawkins conveyed.

Dawkins summed up his illustration by explaining: “It is useful for our brains to *construct* notions like solidity and impenetrability, because such notions help us to navigate our bodies...” through environments (2006, p. 268). Dewey, of course, agreed that concepts and suchlike are useful instruments. He added, however, that if they are deployed as instruments, then we have little reason to evaluate them on the basis of how faithfully they copy or represent reality, and consequently little basis for describing them as misrepresentations of reality (see 1908, pp. 45-46).

Commentators sometimes charge that Democritus misrepresented reality when he claimed atoms are indivisible. In doing so, they fail to appreciate that *atomas* meant “indivisible” and that it was modern era scientists who misapplied the term. Dawkins has committed the same basic error, for we usually do not use the terms “solid” and “impenetrable” to designate the ultimate nature of entities, but rather to indicate what we can do with them and they to us. A solidly built chair bears our weight. An impenetrably, solid fog interferes with vision and movement. Unlike liquid or gaseous water, we can handle solid ice, walk upon it or risk falling through it. In short, when Dawkins claimed that “our brains . . . *construct* notions like solidity and impenetrability, because such notions help us to navigate our bodies,” he did not seem to recognize that the concepts—regardless of how or why they might arise—describe how we act and therewith perceive the world.

As with James before him and Dawkins after him, Dewey (1920) acknowledged a profound debt to the biological sciences, particularly evolutionary science (see pp. 84-86). As with Dawkins (2006), moreover, who has suggested that concepts are useful ways of adapting to the world and that “[w]hat we see . . . is not the unvarnished real world” (p. 371), Dewey held that concepts are instruments and that schemes of conceptual classification are not “bare transcript[s] or duplicate[s] of some finished and done-for arrangement pre-existing in nature” (p. 154). They are not, however, because representing the real world is not their chief function. They are used, rather, to negotiate realities we encounter. Dawkins has emphasized just this point. Yet he has failed to emphasize, as Dewey did, that this instrumental view does not, by any means,

...commit us to the notion that classes are purely verbal or purely mental. Organization is no more merely nominal or mental in any art, including the art of inquiry, than it is in a department store or railway system. The necessity of execution supplies objective criteria. Things have to be sorted out and arranged so that their grouping will promote successful action for ends (p. 154).

So whereas Dawkins would insist that our perception and conception of the world is built “inside our head” (p. 361), Dewey insisted that our conceptual ways of classifying the world “...are not restricted . . . to inner consciousness; they concern *objective action*. They must take effect in the world” (p. 154, emphasis added).

-Four-

World-Building and World-Grammars

John Steinbeck (1939) portrayed an instance of world-building that occurred daily as victims of the Great Depression flocked to California. “In the daylight,” he wrote,

[people] scuttled like bugs to the westward; and as the dark caught them, they clustered like bugs near to shelter and to water. . . . Thus it might be that one family camped near a spring, and another camped for the spring and for company, and a third because two families had pioneered the place and found it good. And when the sun went down, perhaps twenty families and twenty cars were there. [...]

Every night a world created, complete with furniture—friends made and enemies established; a world complete with braggarts and with cowards, with quiet men, with humble men, with kindly men. Every night relationships that make a world, established (pp. 264-265).

Steinbeck went on to say that “[a] certain physical pattern is needed for the building of a world” (p. 266). In his example, this included “water, a river bank, a stream, a spring, or even a faucet unguarded. And there is needed enough flat land to pitch the tents, a little brush or wood to build the fires,” and more besides (pp. 266-267).

The previous chapter, with its example of hands meeting bottles, argued that perceptual experiences pattern around structural loci. This chapter argues that worlds are similarly formed. In the same way that the nighttime world of the migrants gathers around a common concern for water, companionship, space for tents, firewood and a dream of better life in the west, an entire weekend of late night revelry and early morning hangovers may be organized around bottled beer. So too may the agricultural, industrial and commercial activities, not to mention the physical space, of a beer-producing town.

Martin Heidegger (1949) noted that “...the Old High German word *thing* means a gathering to deliberate on a matter under discussion, a contested matter” (p. 172), and therefore a matter of concern; and in the just mentioned examples, life activity gathers around a concern for particular things. Insofar as these things are not merely concrete entities, but assembling places—insofar as “thing” means “that which gathers”—Heidegger rightly added that “[t]he thing things [a] world” (p. 178).

World, Meaning and Form

That worlds gather around things does not mean that things are first there and that worlds only appear afterwards. In the case of bottled-beer, the thing is literally a crafted item, a physical and cultural product of the human world. But more crucially, it is made into the kind of thing that it is for us by the ways in which it stands as an object of practical concern or importance in our lived worlds. Bottled beer is important or significant—and hence meaningful—to both the earlier mentioned revellers and the townspeople, yet not, on the whole, for the same reasons. In the world of the former, it is perhaps valued most as a social lubricant; in that of the latter, as an economic commodity and a product of local pride. Thus it does not mean exactly the same thing in the two worlds, and consequently does not show up in the same way. James wrote that when one asks what kind of thing something is, “[t]he living question always is, Where *is* it found?” (1879b, p. 967). Grasping what a phenomenon “is,” among other things, means being familiar with its place(s) within particular world-contexts.

Here it is helpful to recall that James regarded a concept as a “teleological instrument” (1879b, p. 952), and “...the mind as an essentially teleological mechanism” (1881, p. 544). That is, he held that “...essence, the ground of conception, varies with the end [or *telos*] we have in view” (1879b, p. 952), and he characterized the mind as an agency that pursues interests, purposes, *teloi* or ends. It is also important to note that “a world” here connotes a teleological centre of life. It connotes a field of interaction that gravitates around certain concerns or purposes; and if “essence”—which here means the meaning and general appearance of a thing—is determined by the ends-in-view, then a world is a field that allows brute particulars to show up as definite kinds of things, so that, as Dewey put it, “we become capable of perceiving things instead of merely feeling and having them” (1925, p. 182). To borrow an illustration from Heidegger, our concerned or interested involvement in a world is a pre-condition of us encountering things as “ready-to-hand” (1927, p. 117/85), which means roughly, though not exactly, as instruments or tools. A hammer appears as a hammer—as opposed to a mere stick-like thing with a metal block on one end—insofar as it is encountered in a world where nails are hammered into wood for the purpose of making furniture, houses and so forth, and this for the purpose of building habitable spaces. It is thus that Heidegger asserted that the ready-to-hand character of things is grasped only on the basis of prior familiarity with a range of concerned involvements that make up a particular world (1927, p. 118/85).

Along these lines, James and Dewey suggested that we inhabit worlds that are organized around practical concerns and purposes, for example, our purposes as carpenters, as scientists or as conservationists; that worlds supply a kind of connecting

framework within which things interlock meaningfully; and that “[t]o know an object,” therefore, “*is to lead to it through a context which the world supplies*” (James 1895b, p. 109). There are a number of junctures, however, at which James’ position on meaning departs from Dewey’s, which often resembles that of existential phenomenologists such as Heidegger and Merleau-Ponty. First, James held that meaning is primarily conceptual. Dewey, by contrast, held that conceptual meaning is just a small part of an enormously wider field of pre-conceptual or pre-reflective lived meaning—a point addressed in later chapters. Second, James held that purposes direct our attention, so that we selectively attend to certain things, and therewith sculpt the world of sense experience into meaningful forms. Dewey, while granting that something like this goes on, argued that patterns of activity and reciprocal interconnections that constitute a world or lived situation are themselves a “*form or scheme . . . in which meaning and understanding occur*” (1925, p. 181). So while James—particularly in his early and middle period—suggested that meanings are formed through a cognitive process whereby we selectively attach sensible effects to objects of conception, Dewey suggested that general ways of acting in the world constitute general forms of experience and that this supplies an additional basis upon which objects are endowed with meaning.

In articulating this position, Dewey (1920) remarked that “the key to the matter” is curiously found in an “old notion of experience,” an ancient Greek notion (p. 79). “To Plato,” he wrote, “experience meant enslavement to the past, to custom” or engrained habit. Dewey largely accepted this notion of experience, albeit with a number of caveats. First, he stressed that experience becomes thin and loses significance when actions

become overly monotonous, mechanical and blind (see 1925, pp. 358-361). Second, he suggested that habits of interaction underlie (are a precondition of) the general concepts and universal forms that philosophers since Plato have so esteemed. Dewey explained that we engage in certain acts, and consequently undergo "...certain sufferings and affections. Each of these in the time of its [initial] occurrence is isolated, particular—its counterpart is transient appetite and transient sensation" (p. 79). But as separate incidents "pile up" and "accumulate," important regularities "...are selected, reinforced and combined. Gradually a habit of action is built up, and corresponding to this habit there forms a certain generalized picture of an object or situation" (p. 79).

Along with the development of this generalized picture, as Dewey went on to explain,

...there grows up a certain regularity of conduct. . . . The skill develops which is shown by the artisan, the shoemaker, the carpenter, the gymnast, the physician, who have regular ways of handling cases. This regularity signifies, of course, that the particular case is not treated as an isolated particular, but as one of a kind, which therefore demands a *kind* of action. From the multitude of particular illnesses encountered, the physician in learning to class some of them as indigestion learns also to treat the cases of the class in a common or general way. He forms the rule of recommending a certain diet, and prescribing a certain remedy. All this forms what we call experience (1920, p. 80).

More specifically, it forms a kind of experience in which things appear in a general light. Yet it does not thereby wipe out particularities, but rather accentuates particularities that are in some way relevant or important (see 1922, p. 137). In recognizing an ailment as a general disorder called "indigestion," the above mentioned physician does not become insensitive to the specifics of the patient's sufferings, but instead becomes sensitive to

what specific sufferings indicate or *mean*, and so comes, as it were, to see them for “what they are,” namely, symptoms of indigestion.

It is thus that general ways of dealing with things form a kind of experience in which a particular thing or incident comes to have a clear appearance. As organized ways of interacting, habits structure our doings and effects undergone in consequence of them, so that the two unify into connections of “means-consequence,” thus forming meaningful and intelligible relationships, as opposed to haphazard ones. As persistent or enduring ways of interacting, habits also help ensure that connections between doings and undergoings are not merely fleeting—not, as it were, “this way now, another way an instant later.” This too is a condition of establishing intelligible relationships. It will later be seen that habits—particularly skilled habits—are also intentional. They are directed towards objects and objectives; they are purposeful; and pragmatic philosophers, like their classical Greek forebears, held that purpose relates to essence, meaning and intelligible appearance. Of course, whereas classical thinkers maintained that purposes are inherent in things, pragmatists asserted that purposes have to do with the ends we have in view, which does not, however, imply that things have no “say,” for a given thing cannot be put to any purpose whatever. Ends, like the climax to which a story leads, are loci around which actions are structured, sustained and directed towards a common purpose. For these reasons, Dewey maintained that habits and the habitats or worlds they form supply frameworks within which we come to have “a certain general insight” (1920, p. 80). Consequently “[w]e come to know or note not merely this particular which as a particular cannot strictly be known at all”; we come rather to recognize it as “an

individual of a certain kind” (1920, p. 79). We come to recognize general kinds not because a species of things share a feature or set of features, but because they fit within or have a role within a meaningful form of conduct, a teleological centre of life—a world.

In *Experience and Nature* (1925), Dewey once again used ancient Greek thought to elaborate upon his position. “To the Greeks,” he wrote,

a kind was an organized system in which an ideal form unites varying particulars into a genuine whole, and gives to them distinctive and recognizable character. The presence in things of the generic form renders them knowable (pp. 209-210).

The claim that generic forms are present in things—as opposed to minds—is particularly important. It is a reminder that the *eidos* or form of a thing was not, from a classical standpoint, a merely mental way of grouping the thing into a class; it was not an “inner” representation that we project onto the world.

This crucial point, however, is increasingly misunderstood, and the misunderstanding probably follows from the Platonic notion that phenomena we encounter in this world of sense perception can never be real. If we draw a circle on a chalkboard and measure it with sufficient precision, we inevitably find points on the perimeter not equidistant from the centre, and therewith discover that the circle is not a *real* circle, but a semblance of one. And if we observe it through magnified powers of perception, we find further that it is changing, for example, that bits of chalk are flecking from the board. Thus even if the figure started out as a *real* circle, it ceased being one before we even finished drawing it. So there is a sense in which the real circle does not appear physically before the eye, but instead *appears ideationally* before the mind’s

eye—a point reflected in the fact that *eidos*, in ancient Greek texts, literally connoted the appearance of a thing, but could also connote the idea of a thing (see Novak 2004, pp. 1-3).¹¹ There is a sense, therefore, in which the real circle exists only in the realm of ideas—hence the traditional equation of *eidos* to ideas or ideal forms. However, it does not follow from this that we project our idea of a circle onto the world. From a Platonic standpoint, the idea or ideal form exists independently of the knower in much the same way that the Pythagorean theorem continues to hold true (assuming flat space, excluding psychologism, etc.) independently of whether anyone is around to conceive of it; and from a Platonic standpoint, the imperfect copy of the ideal circle on the chalkboard appears as a circle only insofar as we *see* a resemblance between the copy and the ideal.

Dewey did not assert that we actually see general forms in particular things (see 1934, pp. 115-116). Nor did he claim that forms are self-subsistent entities. Yet he did argue that forms and meanings are objective and “out there” in the public world. They are, he maintained,

...because they are modes of . . . interaction[.] . . . The regulative force of legal meanings affords a convenient illustration. A traffic policeman holds up his hand or blows a whistle. His act operates as a signal to direct movements. But it is more than an episodic stimulus. It embodies a rule of social action. Its proximate meaning [i.e., its status as a means to an immediate end] is its near-by consequences in coordination of movements of persons and vehicles; its ulterior and permanent meaning—essence—is its consequence in the way of security of social movements. Failure to observe the signal subjects a person to arrest, fine or imprisonment. The essence embodied in the policeman’s whistle *is not an occult reality*

¹¹ Here I cite Joseph’s Novak’s (2004) “A Sense of Eidos,” which appears in *Eidos*, vol. 28, pp. 77-81. The journal is not accessible on-line, nor is it widely available in print. The article, however, is posted on the journal’s website, yet with a pagination that does not match the original publication. The page numbers I reference correspond to the internet posting.

superimposed upon a sensuous or physical flux and imparting form to it; a mysterious subsistence somehow housed within a psychical event. Its essence is the rule, comprehensive and persisting, the standardized habit, of social interaction, and for the sake of which the whistle is used. The pattern, archetype, that forms the essence of the whistle as a particular noise is an orderly arrangement of the movements of persons, and vehicles established by social agreement as its consequence. This meaning is independent of the psychical landscape, the sensations and imagery, of the policeman and others concerned. But it is not on that account a timeless spiritual ghost nor pale logical subsistence divorced from events (1925, pp. 190-191; emphasis added).

Put another way, while essence and meaning are not manifested in isolated things and incidents, they are embodied in public forms of interaction in which we encounter particular things and incidents, and come to know “what they are,” which is to say, what they mean. This is why Dewey suggested that a lived situation or world is a “*form* or scheme . . . in which meaning and understanding occur” (1925, p. 181).

Some readers—particularly the scientifically minded—may object that any world is ultimately made of brute physical stuff; that physical stuff is without inherent meaning or purpose; and that meaning, therefore, is not inherent in worldly forms, but imposed upon the world by us. Yet here it is worth recalling James’ observation that the proposition that the world is ultimately physical is a proposition about what the world *essentially* is,

...[and] the whole doctrine of essential characters is intimately bound up with a teleological view of the world. Materialism becomes self-contradictory when it denies teleology, and yet in the same breath calls atoms, *etc.*, essential facts (1890ii, p. 336, fn.).

Or as Dewey (1925) articulated the point, what holds in the case of the police whistle also holds in the case of “non-human” phenomena such as “gravity” or “fire” (p. 191).

Certain consequences of these physical phenomena “concern us,” but “...the consequences are not *merely* physical; they enter finally into human action and destiny” (p. 191). As with the whistle, therefore, the “meaning” or “essence” of physical phenomena includes “...the consequences of certain natural events within the scheme of human activities, in the experience of social intercourse” (p. 191). Thus if scientists say physicality is essential, they in practice mean essential for scientific purposes, which is to say, essential within the scientific worlds—the teleological fields of intercourse and interaction scientists inhabit. In making the claim that reality is essentially physical, therefore, scientists concede that they never encounter a world of brute facts—a world utterly devoid of purpose and meaning.¹² They also come close to committing a fallacy that “consists in the supposition that whatever is found true under certain conditions may forthwith be asserted universally or without limits and conditions.” This, quipped Dewey, is analogous to arguing that “[b]ecause a thirsty man gets satisfaction from drinking water, bliss consists in being drowned” (1922, p. 175).

By revisiting James’ theory of meaning and reinterpreting it through the work of Dewey, we learn that meaningful forms or schemes do not first arise in private consciousness, and later get “mentally projected” onto the world. Or rather, meaningful forms may sometimes initially arise in private consciousness; yet they do not really

¹² In the passage from which the above quoted lines are excerpted, Dewey grants that scientists may to some extent ignore meanings that arise out of everyday forms of social intercourse. However, this does not challenge the claim that scientific conceptions about physical phenomena relate to consequences that such phenomena have within schemes of human activity. After all, science—like language—is practically impossible in the absence of interactions between sentient beings. Consequently a field of science is, among other things, a form of social intercourse.

communicate anything and hence do not have genuine meaning until they become public forms of interaction. Dewey (1925) thus cautioned us not to confuse pragmatic accounts of meaning with the nominalist doctrine that only particular things and incidents are real; that general concepts are adventitious and arbitrary ways of carving reality up; and that words denoting general concepts are mere names that do not correspond to actual forms in the world. “The defect of nominalism,” he explained, “lies in its virtual denial of interaction and association” (p. 184). It treats words

...not as a mode of social action with which to realize the ends of association, but as an expression of a ready-made, exclusively individual, mental state; sensation, image or feeling, which, being an existence, is necessarily particular. For the sound, gesture, or written mark which is involved in language is a particular existence. But as such it is not a *word*; and it does not become a word by declaring a mental existence; it becomes a word by gaining meaning; and it gains meaning when its use establishes a genuine community of action (pp. 184-185).

By the same token, meaningful forms—even those that initially arise in private consciousness—only acquire meaning insofar as they are embodied in public forms of interaction. It consequently remains so that worldly situations are themselves forms or schemes in which meaning occurs, so that meaning is no mere mental projection.

World-Grammars and Our Sense of Reality

For Steinbeck (1939), world-building is a technique, an art, and with greater mastery of the art, worlds become increasingly structured. The Great Depression migrants, he wrote,

...were [initially] timid in the building and tumbling worlds, but gradually the technique of building worlds became their technique. Then leaders emerged, then laws were made, then codes came into being. [...]

The families learned what rights must be observed—the right of privacy in the tent; the right to keep the past black hidden in the heart; the right to talk and to listen; the right to refuse help or to accept, to offer help or to decline it; the right of son to court and daughter to be courted; the right of the hungry to be fed; the rights of the pregnant and the sick to transcend all other rights.

And the families learned, although no one told them, what rights are monstrous and must be destroyed: the right to intrude upon privacy, the right to be noisy while the camp slept, the right of seduction or rape, the right of adultery and theft and murder. These rights were crushed, because the little worlds could not exist for even a night with such rights alive.

And as the worlds moved westward, rules became laws, although no one told the families. It is unlawful to foul near the camp; it is unlawful in any way to foul the drinking water; it is unlawful to eat good rich food near one who is hungry, unless he is asked to share. [...]

The families moved westward, and the technique of building the worlds improved so that the people could be safe in their worlds; and the form was so fixed that a family acting in the rules knew it was safe in the rules (pp. 265-266).

It might be said that with more mastery in the art of world-building, worlds increasingly take on a sort of “grammar.” In language, grammar roughly delimits what combinations of words are permissible, and what combinations have sense or meaning. In worlds, it delimits what sorts of actions are allowed, and it is a precondition of certain things and events having certain meanings. That certain sexual unions *mean* “adultery” for the migrants is a consequence of them inhabiting a world in which it is illicit to exchange a longtime mate for another. Indeed, adultery can only exist—can only be a reality—in a

world where sexual behaviour is codified, which is to say, arranged around certain social boundaries or limits.

A now reoccurring idea discussed in this work is that limits, by constraining certain actions and affording others, shape our sense of reality; and an idea introduced in this chapter is that worlds impose structural limits on action and therewith delimit our sense of what is real. Steinbeck's example helps illustrate this. So too do the accounts of scientific principles and spiritual beliefs discussed in Chapter Two. There it was seen that the principles of uniformity and causality are so woven into the world lived by most scientists that most are wont to "see" them as realities infusing nearly everything. It was also seen that the divine too exerts such an organizing influence on the lived world of believers that they may similarly sense it in flowers and trees, in life and being—to sense all this almost as plainly as one senses the blue of the sky.

Here the usage of the term "sense" is not exactly literal; yet neither is it merely metaphorical. In the words of James:

It is as if there were in the human consciousness a *sense of reality*, a *feeling of objective presence*, a *perception* of what we may call "something there," more deep and more general than any of the special and particular "senses" by which the current psychology supposes existent realities to be originally revealed (1902, p. 59).

This "sense of reality" might be understood as a "world-grammar" to which experiences habitually conform. In the everyday world, people can walk on garden paths, but not water; they can climb stairs, but not columns of air. The everyday world has various constraints and affordances; these constitute "grammars" or rules to which actions

conform; and to a significant degree these rules about what people can and cannot do delimit their sense of what can and cannot be, which is to say, their sense of reality.

So similarly with scientific and religious worlds. Inhabiting scientific worlds often means acting in conformity with belief in the principles; inhabiting religious worlds, with belief in the divine. This means following certain conventions, engaging in certain *customary* ways of handling and interacting. As Dewey (1922) noted, “...customs supply standards for personal activities. They are the pattern into which individual activity must weave itself” (p. 75). As such, they shape people’s sense of reality. They do so in the earlier discussed sense of providing a scheme in which people acquire a relatively stable and generalized picture of an object or situation. But more pertinently, habitual patterns of acting constitute rules or mores for what people can and cannot do (p. 75), and this, once again, significantly delimits people’s sense of what can and cannot be and therewith their sense of reality. Again, the actions of oncologists gravitate around the belief that cancer has causes; the notion that it might occur for no reason is almost nonsensical in their world; and that which is nonsensical—the nonsense term “skrkl” to use an example from James—has not even “*the possibility of . . . referring*” to any particular reality (1907b, pp. 913-914). One assumes the notion of a godless universe is similarly without sense of reality for religious figures such as St. Ignatius, who actively embraced a painful execution in hopes of emulating the death of Jesus for the sake of God.

The challenge here—and a general challenge pursued in this work—is to show that our “sense of reality” is not merely in our heads. The challenge, to put it another

way, is to show that the limits that delineate our sense of reality are not merely mental constraints on how we think, much less merely private or personal ways of seeing things. When Steinbeck said that “[a] certain physical pattern is needed for the building of a world” (1939, p. 266), he suggested, among other things, that we build worlds in the same tangible sense that we build houses. A house does not merely limit how we picture a particular locale “in our heads”; rather, the house—with its walls, stairways, doors, halls, rooms and so forth—imposes structural limits on how we can act within that locale. How we can act within that locale constrains how we can experience and know it, and consequently how it shows up or appears to us.

Oikos is Greek for “house” or “living space”; it is also the root of the word “ecology”; and a very literal sense in which we bring a world into being is by nurturing a sort of ecological system—or what may here be called a “culture,” for instance, a “culture of science.” The word “culture”—related to the word “cultivate,” and derived from Latin *cultura* for “growing,” and *cult* for “inhabited”—carries connotations of life; and when one speaks of culture, one often speaks of a way of life, a lifestyle—habits of living. This includes customs, styles of expression and comportment; it includes artistic traditions—not just fine art, but also handicraft, usage of tools, methods of doing and making; it includes heritages of beliefs, which, along with everything else mentioned, are also habits of interaction. We cannot negotiate and genuinely inhabit a culture without conforming in some degree to the grammars—the patterns of doing—of the culture. We cannot, for example, negotiate French culture if we speak only English. A culture thus chastens us to engage in certain publicly shared forms of interaction. A culture is a highly developed

instance of what James (1905) called an “activity-situation.” By activity-situation he means an active human life situation, and consequently a situation that “...comes with definite direction; it comes with desire and sense of goal; it comes complicated with resistances...” (p. 4). Activity-situations often function as a sort of environmental tissue joining things together, so that the situation manifests a “*fundirte inhalte*” or “*gestaltqualität*” (p. 5), which is to say, a “consolidated fundament” or “form-quality.”

The activities of behavioral scientists, to recycle an example from Chapter Two, create laboratory environments that pace participants through set sequences of tasks, and often limit their responses to checkmarks on scales. They also create academic environments that, among other things, place a premium on statistical interpretations. By sequencing actions, and limiting responses to a finite number of alternatives, the laboratory environment funnels behaviors into orders that can easily be understood in terms of uniform cause-and-effect relations. By insisting on statistical interpretations, the academic environment does much the same. This is, in fact, something that the world or culture of science generally does—“world” or “culture” here referring to vocabularies, concepts, methods and tools through which scientists interact with one another and with the objects of their investigations. Seen thus, the principles of uniformity and causality essentially name habitual ways in which the activities of scientists are patterned; ways in which objects, both conceptual and physical, are made to relate; ways, therefore, in which the scientific world knits together and consolidates.

Hence while the principles of uniformity and causality are not experienced as substantive facts, they are encountered as overall ways of doing, bringing together,

cohering and sense-making. It might be said that they are not observed in the world, but are forms that certain scientific worlds take. It might be said, therefore, that the principles demarcate a *formal* limit of certain scientific worlds. They mark a reach beyond which certain scientists do not act and therewith a horizon beyond which they do not see.

Dewey (1922) expressed this sentiment when he wrote that habits increase the “efficiency” of the intellect by “restrict[ing] its reach” (p. 172). “They are blinders that confine the eyes of mind to the road ahead. They prevent thought from straying away from its imminent occupation to a landscape more varied and picturesque but irrelevant to [the] practice” underway (p. 172).

The suggestion that scientists “build” or “construct” worlds and that these worlds limit their view of reality, combined with the earlier claim that worlds are organized around practical interests, has a superficial resonance with certain postmodern and sociological outlooks that attack the purported objectivity of scientific beliefs. But as should be evident by now, classical pragmatists meant to undermine the notion that we are trapped within bubbles of subjectivity. An initial point to note is that we construct or build all sorts of things—gardens, houses, works of art and more besides. Yet almost nobody concludes that these things are subjective figments of our imagination merely because they are constructed. So we should not conclude that beliefs are subjective merely because they “occur,” as Dewey put it, in worldly forms or schemes that we help construct. As Dewey explained:

Knowledge or science, as a work of art, like any other work of art, confers upon things traits and potentialities which did not *previously* belong to them. Objection from the side of alleged realism [that this makes

knowledge merely subjective] . . . springs from a confusion of tenses. Knowledge is not a distortion or perversion which confers upon *its* subject-matter traits which *do* not belong to it, but is an act which confers upon non-cognitive material traits which *did* not belong to it. It marks a change by which physical events exhibiting properties of mechanical energy, connected by relations of push and pull, hitting, rebounding, splitting and consolidating, realize characters, meanings and relations of meanings *hitherto* not possessed by them (1925, pp. 381).

It may be, to return to the example of behavioural scientists, that laboratory environments make human behaviours more ordered than they otherwise would be. Yet this does not alter the fact that human behaviours have a statistically expressible degree of order within that setting, nor does it disqualify discoveries that scientists make within that setting. The fact that humans can be *made* to behave in certain ways tells us something about human beings.

So also with other things we make. The fact that we can build a house that does not fall down or a scientific world that allows us to consistently and fruitfully handle certain kinds of phenomena tells us something about the realities with which we are dealing. It also suggests that our beliefs about reality have a worldly basis: that they are not mere artefacts of how we happen to represent realities in our minds, but indicators of how particular forms of reality are tangibly manifested in worlds that we actually live. Dewey (1925) captured this point nicely when he wrote that “the whole history of science, art and morals”—in other words, the history of human knowledge—shows “...that the mind that appears *in* individuals is not as such individual mind [sic.]” (p. 219), private, subjective and cut off from “external” realities. “Mind denotes [a] whole system of meanings as they are embodied in the workings of organic life” (p. 303). It is

“...itself a system of belief, recognitions, and ignorances, of acceptances and rejections, of expectancies and appraisals of meanings which have been instituted under the influence of custom and tradition” (p. 219), which is to say, within the lived settings of cultures or worlds.

-Five-

Experience and Subjectivity as Actions of Being in the World

Dewey wrote that “[e]xperience is no slipping along in a path fixed by inner consciousness. Private consciousness is an incidental outcome of experience of a vital objective sort; it is not its source” (1917, p. 11). Here, as in many of Dewey’s other middle and late works, “objective” roughly meant “concretely in the world”; and “experience of a vital sort” connoted experience within which things integrate meaningfully, which is to say, into connections of “means-consequence.” According to Dewey, such experience emerges in the following way:

The organism acts in accordance with its own structure, simple or complex, upon its surroundings. As a consequence the changes produced in the environment react upon the organism and its activities. The living creature undergoes, suffers, the consequences of its own behavior. This close connection between doing and suffering or undergoing forms what we call experience. . . . [S]uppose a busy infant puts his finger in the fire; the doing is random, aimless, without intention or reflection. But something happens in consequence. The child undergoes heat, he suffers pain. The doing and undergoing, the reaching and the burn, are connected. One comes to suggest and mean the other. Then there is experience in a vital and significant sense (1920, pp. 86-87; also see 1934, pp. 43-45).

To borrow words from Merleau-Ponty, experience of a vital objective sort arises when doings and undergoings are “...exercised and linked together in the general action of being in the world” (1945, p. 234).

It is worth emphasizing that Dewey did not, in the above quoted passages, claim there is no such thing as a private consciousness that is “exclusively mine” and “directly accessible only to me.” What he claimed, rather, was that private consciousness is an

incidental aspect of experience, not its substance. Elsewhere he added that private consciousness or inner experience is without meaning and almost without reality when cut off from the lived world. With other phenomenologically oriented thinkers, he argued that inner experience is unintelligible if one attempts to understand it in isolation from our being in the world. He also argued that inner experience is the exception rather than the norm, and that the increased salience of inner experience is often symptomatic of a kind of breakdown or pathology.

Emotional Experience

We often regard emotions as quintessential examples of “inner phenomena,” which is to say, phenomena accessible only through introspection. Yet as Merleau-Ponty (1947) pointed out in a piece published near the end of Dewey’s life, “introspection gives [us] almost nothing” (p. 52). If we try to study love or anger from inner observation alone, we “...will find little to describe: a few pangs, a few heart-throbs—in short, trite agitations...” that convey little about what these emotions mean (p. 52).

A first point to note, therefore, is that we understand the significance of emotions such as love or anger by grasping them in relation to objects of love or anger in the world. Emotions, wrote Dewey (1934), “are attached to objects and events,” and “...are not, save in pathological instances, private” (p. 42). An overwhelming anger connected to nothing in the world constitutes a kind of breakdown or disorder in the obvious sense that it is felt for no reason, but also in the secondary sense that the emotion, in order to persist, “demands something beyond itself to which to attach itself” (p. 42). Hence

pathologically angry people lash out at nearly anything; they perceive slights where none have occurred, and thus generate “delusion[s] in lack of something real” (p. 42; also see 1922, p. 140). To say that emotions are not purely private and that they demand objects is to say what is relatively obvious: emotions are manners of comporting ourselves towards people, things and events, ways of interacting and being in the world. They are, to be sure, something we feel, but they are also something we do and live

A second point to note, accordingly, is that emotions are constituted in and through life situations. We say emotions are “in” us. Yet we also speak of ourselves as “being in” emotional moods, and there are times when being in the midst of a situation means being in the midst of a public emotional atmosphere. The merry-making that goes on at a Christmas party, for example, constitutes a public emotional atmosphere in the midst of which merry-makers find themselves. Some, it is true, may be less than merry, but often this is a result of a kind of breakdown, as when people suffer from depression or associate a painful past experience with the holidays. The claim here is not that there is a proper way that people ought to feel in given situations, but that situations have a public mood, and that we can sense this mood even if we find ourselves unable to partake in it.

A third point to note, then, is that emotion, as Dewey (1934) put it, is “a mode of sense” (p. 30). Much as colours are qualities of things in the world, an emotion “is *to* or *from* or *about* something objective” (p. 67). To speak of an emotion as having objective reference—as something perceived about the world—admittedly sounds strange, yet we actually talk this way in everyday life. “Situations are depressing, threatening, intolerable, triumphant” (p. 67), we say. The earlier discussed example with the hand and

the beer bottle illustrated how perceived qualities appear through a mutual participation of subject and object. Dewey argued that the emotional qualities of lived situations likewise build, develop and come into appearance through “an interpenetration of self with objective conditions” (p. 67).

The beer bottle example and the related example about the yellow of the lemon also illustrated how perceived qualities are effects of interrelationships, and Merleau-Ponty (1947), by invoking a famous cinematic experiment, suggested that emotional expressions are to be similarly understood:

One day [the filmmaker and theorist] Pudovkin took a close-up of [the actor] Mosjoukin with a completely impassive expression and projected it after showing: first, a bowl of soup, then, a young woman lying dead in a coffin, and, last a child playing with a teddy bear. The first thing noticed was that Mosjoukin seemed to be looking at the bowl, the young woman, and the child, and next one noted that he was looking pensively at the dish, that he wore an expression of sorrow when looking at the woman, and that he had a glowing smile for the child. The audience was amazed at his variety of expression although the same shot had actually been used all three times and was, if anything, remarkably inexpressive (p. 54).¹³

A body of psychological literature claims that people cannot fake emotional facial expressions. Yet in light of the above incident, one wonders if psychologists have confused something. It is true that Mosjoukin is not completely in charge of what he expresses, yet this is not because his facial muscles jerk involuntarily into different expressions. Although this happens in everyday life, it does not happen here since the same shot of Mosjoukin is always used. One might want to dismiss this cinematic effect as an illusion, but the word “effect” suggests another interpretation. As with appearance

of colour, length or any other perceived quality, different expressions appear on Mosjoukin's face in consequence of (i.e., effects of) his placement within objectively different situations (i.e., interrelationships). These effects, it is true, can only show up in the presence of an observer with certain sensitivities. However, this is also so with properties such as colour, length and mass, and most, excepting philosophers, do not dismiss the appearance of such properties as illusions.

The account offered in this section does not—to repeat an earlier stated caveat—deny that we have private feelings. But what it does indicate, as Dewey (1922) explained, is that “love,” “fear” and other such words “...do not express elements or forces which are psychic or mental *in their first intention*” (p. 62). What we think of as inward movements and dispositions “...are working adaptations of personal capacities with environmental forces” (p. 16). “They denote *ways of behavior*” (p. 62) through which love and fear come to be known as love and fear.

Experience, Self and World

Although the question of how we can “...ever get outside of our *private inner experiences* so as to come to know the things and people in the *public external world* . . . seems . . . sensible . . . to us now,” the question, as Hubert Dreyfus observed in a 2003 article, “...has not always been taken seriously” (p. 19). It seems, for example, that the Homeric Greeks regarded inner experience as a rather exceptional phenomenon, as

¹³ While Merleau-Ponty credits Vsevolod Pudovkin, most of credit really belongs to Lev Kuleshov. Pudovkin, indeed, wrote about the experiment, but the experiment was conducted in what is now remembered as “the Kuleshov workshop.”

evidenced by the fact that “Homer considered it one of Odysseus’s cleverest tricks that he could cry inwardly while his eyes remained [dry]” (p. 19).¹⁴ “As far as I know,” Dreyfus added, “there is no other reference to private feelings in Homer. Rather, there are many public displays of emotions, and shared visions of gods, monsters, and future events” (p. 29).

Along similar lines, Dewey (1925) claimed that experience, for the ancient Greeks, “...was the outcome of accumulation of practical acts, sufferings and perception gradually built up into the skill of the carpenter, shoemaker, pilot, farmer, general, and politician. There was nothing merely personal or subjective about it” (p. 230). He complained that while the concept of “inner experience” was relatively foreign to Greeks, and only really “discovered” in the modern era (p. 172), he could hardly use the term “experience” without being asked: “Whose experience?” Dewey indicated that the question was put to him in “adverse criticism,” by those who assumed “...that experience by its very nature is owned by someone; and that the ownership is such in kind that everything about experience is affected by a private and exclusive quality” (p. 231).

Whereas many modern thinkers would regard this as an obviously warranted assumption, Dewey (1925) deemed it patently absurd. To make this assumption, he protested,

is as absurd as it would be to infer from the fact that houses are usually owned, are mine and yours and his, that possessive reference so permeates the properties of being a house that nothing intelligible can be said about the latter. It is obvious, however, that a house can be owned only when it has existence and properties independent of being owned. The quality of

¹⁴ Dreyfus cites Homer, *The Odyssey*, trans. Robert Fitzgerald (New York: Vintage Classics, 1990), p. 360.

belonging to some one is not an all-absorbing maw in which independent properties and relations disappear to be digested into egohood. [...]

Substitute “experience” for “house,” and no other word need be changed. Experience when it happens has the same dependence upon objective natural events, physical and social, as has the occurrence of a house. It has its own objective and definitive traits; these can be described without reference to a self, precisely as a house is of brick, has eight rooms, etc., irrespective of whom it belongs to (pp. 231-232).

Again, Dewey did not deny that we have private consciousness, nor even that private consciousness may be a condition of us having experience. What he denied, rather, is that experience can only be understood as an essentially inner process. As he suggested in the just quoted passage, most experiences can be described without reference to inner life; and as in the case of emotion, if we attempt to describe experience without reference to the worlds in which we live, we reduce experience to almost nothing.

Dewey, however, came to sense that his message had consistently fallen on deaf ears, and he expressed frustration less than two years before his death when he remarked: “Were I to write (or rewrite) *Experience and Nature* today I would entitle the book *Culture and Nature*.” “I would abandon the term ‘experience’ . . . [because] historical obstacles which prevented understanding of my use of ‘experience’ are, for all practical purposes, insurmountable” (c. 1951, p. 361). A syllabus from a course Dewey taught nearly three decades earlier—and just a few years before the publication of *Experience and Nature*—indicates what these obstacles were, and what Dewey meant by relating experience to culture:

The word “experience” is here taken non-technically. Its nearest equivalents are such words as “life,” “history,” “culture,” (in its anthropological use). It does not mean processes and modes of

experiencing apart from what is experienced and lived. The philosophical value of the term is to provide a way of referring to the unity or totality between what is experienced and the way it is experienced, a totality which is broken up and referred to only in ready-made distinctions or by such words as “world,” “things,” “objects” on the one hand and “mind,” “subject,” “person,” “consciousness” on the other. Similarly “history” denotes both events and our record or interpretations of them; while “events” include not only acts and sufferings of human beings but all cosmic and institutional conditions and forces which in any way whatsoever enter and effect these human beings—in short, the wide universe as manifesting itself in the careers and fortunes of human beings (1922-1923, p. 351; cf. c. 1951, p. 363).¹⁵

For Dewey, “culture” designated “...reciprocal interconnections, that immense diversity of human affairs, interest, concerns, values...” (c. 1951, p. 363). By relating experience to culture, Dewey suggested experience is an ecological phenomenon: experiences are developed over time through our participation within communities of interrelated agencies and things, both human and non-human. One might say that experience goes on in the world as opposed to the mind. However, this is perhaps a bad way of putting it, for Dewey regarded the dichotomous opposition between mind and world as a primary a obstacle that had led others to misconstrue what he meant by the word “experience.”

In the parlance of the previous chapter, a culture is a world or *oikos*—*oikos* being Greek for “house” or “living space,” and the root of the word “ecosystem”; and in Dewey’s parlance culture is almost equivalent to experience—“almost” because Dewey (1925) granted that the “modern discovery of inner experience” (p. 172) has changed how we experience things, and in some ways for the better. The discovery “...of a realm of

¹⁵ In using this quotation to help explain Dewey’s reasons for relating experience to culture, I borrow from Thomas M. Alexander, who does the same in his (1987) *John Dewey’s Theory of Art, Experience, and Nature* (pp. 70-71).

purely personal events that are always at the individual's command, and that are his exclusively as well as inexpensively for refuge, is . . . liberating..." (p. 172). It is liberating, Dewey explained, because "[i]t implies a new worth and sense of dignity in human individuality, a sense that an individual is not a mere property of nature, set in place according to a scheme independent of him..." (p. 172). It implies that the individual "...adds something, that he marks a contribution" (p. 172). It reflects a trend in modern western culture "...where individuality is given room and movement"—a trend that stands "...in contrast to the ancient scheme of experience, which held individuals tightly within a given order subordinated to its structure and patterns" (p. 173). Yet this view of subjectivity also reflects a distortion: a failure to recognize that an individual ego or self is made and discovered through participating in worlds or cultures; and this, Dewey asserted, has "...led to the subjectivistic, solipsistic and egotistic strain in modern thought" (p. 173).

Here Dewey used the term "egotistic" in a number of related senses. He used it to emphasize that modern philosophy holds that we access and know the world from the vantage point of the ego, the "inner self" or the "I am." He also used it to insinuate that there is something unhealthy about this, for to be an egotist is to be pathologically focused on self. That this is so, according to Dewey (1922), is reinforced by the fact that

[m]any good words get spoiled when the word self is prefixed to them: Words like pity, confidence, sacrifice, control, love. The reason is not far to seek. The word self infects them with a *fixed introversion and isolation*. It implies that the act of love or trust or control is turned back upon a self which already is in full existence and in whose behalf the act operates. Pity fulfils and creates a self when it is directed outward, opening the mind to new contacts and receptions. Pity for self withdraws the mind back into

itself, rendering its subject unable to learn from the buffetings of fortune. Sacrifice may enlarge a self by bringing about surrender of acquired possessions to requirements of new growth. Self-sacrifice means a self-maiming which asks for compensatory pay in some later possession or indulgence. Confidence as an outgoing act is directness and courage in meeting the facts of life, trusting them to bring instruction and support to a developing self. Confidence which terminates in the self means a smug complacency that renders a person obtuse to instruction by events (pp. 138-139; emphasis added)

Dewey suggested, therefore, that we at least tacitly sense that a high degree of inward focus is symptomatic of unhealthy functioning. Since unhealthy functioning is, by most definitions, contrary to normal functioning, we should also recognize that the self is not, under normal circumstances, a strictly inner phenomenon. According to Dewey, however, we moderns generally fail to see this. We fail, as he put it, to see that “[t]here is no one ready-made self behind activities.” What there is, rather, is a host of “...complex, unstable, opposing attitudes, habits, impulses which gradually come to terms with one another...” (p. 138) through a person’s ongoing processes of living.

Thus, for example, while we moderns might think that a woman becomes a civil rights activist because of “who she is” independently of the world, Dewey would argue that she is “who she is” by virtue of her being and acting in the world. He would grant, to be sure, that the woman enters life already equipped with a range of inclinations and capacities, and that these shape her worldly interactions. However, a mere bundle of propensities does not constitute that integrated kind of being we call “self,” and Dewey would add that the woman only ever develops a self by participating in worlds. Like the hand meeting the resistance of the beer bottle and subsequently coordinating its actions around the bottle, the woman directs her energies against socially oppressive barriers.

This shapes the overall course of her life, giving it purpose, direction and form. She cultivates a personal *disposition*—a self—by developing habits, for *habits are dispositions* towards certain forms of worldly interaction. They are, as Dewey (1922) put it, “...demands for certain kinds of activity; and they constitute the self” (p. 25). There is even a sense in which they are what we call personal “will,” for they are inclinations to do certain things, to move towards, seek, chase after and want them (p. 25). “Were it not for the continued operation of all habits in every act, no such thing as character could exist. There would be simply a bundle, an untied bundle at that...” (p. 38). Here it is important to note that participation is not surrender, a mere giving into worlds. The woman resists certain customs, certain entrenched cultural habits or worlds, and resisting “...existing custom[s] is the beginning of individuality in mind” (pp. 87-88). It gives the woman something against which to define herself. Thereby she not only becomes an integrated subject, but also an individuated one. Thus the being of subjects presupposes the being of worlds in a variety of ways: it presupposes worlds to coordinate with, to resist, to reform and remake.

Since the time of René Descartes, many have supposed that we can know ourselves as subjects, but never know for certain that the “external” world exists—never be sure, that is to say, that the world is not a fabrication of mind. Dewey regarded this as a misleading way of speaking, for it employs concepts that we only possess by virtue of already being in worlds. The world of stonemasonry, for example, exists only insofar as stonemasons employ their practiced habits. But while the world of stonemasonry consequently presupposes the existence of stonemasons, the reverse also holds, for the

habits that make stonemasons what they are also make the world of stonemasonry what it is. In phenomenological parlance, therefore, the habits are intentional: they are to or about or of something, directed towards it. In Dewey's language (1922), they "implicate" worlds. They do so in much the same way that "[w]alking implicates the ground as well as the legs," and "digesting" and "breathing" implicate "food" and "air" as much as they do internal "tissues of stomach" and "lung" (p. 14). In short, that which is "inside" implicates an "outside," and the former is only conceptually grasped through its relationship with the latter.

Descartes declared *cogito, ergo sum*—a statement usually translated as "I think, therefore I am." But on Dewey's account, unitary beings that can legitimately say "I am" only emerge by virtue of their involvement with the world or worlds. Furthermore, when philosophers under the sway of Descartes have said that we can never be certain that the world exists, they have presupposed that the world is an objective entity that exists independently of us. While it is sometimes useful to speak of the world in this way, and while it is likely true that we can never know for certain that such a world exists, it is well to remember that we do not experience worlds in this way. We experience ourselves in the midst of them, entangled in them. It is only through an intellectual effort—a stepping back from our experience—that we come to regard ourselves as detached observers of an independently existing world. The concept of an independently existing world is what Merleau-Ponty called a "second order expression." This means, on the one hand, that it does not describe the worlds we actually live; and, on the other, that it presupposes concepts derived from lived experience.

Whereas modern thinkers, particularly those under the sway of Descartes, see the self or subject as a sort of bubble inside of which the world is represented, Dewey suggested that a world is a setting in which the individual subject comes to be. On the former account, experience is a kind of “inner space” in which the world appears; on the latter, the world is a field in which experience is had, thus diminishing the need to conceive of experience in terms of “inward representations.” On the former, the appearance of the world depends on there being a subject to measure or gauge it; yet the appearance of the subject to itself does not depend on there being a world. On the latter, the appearance of the world also depends on there being a subject to gauge it—or, more accurately, to *engage* with things within it; yet since the subject only knows itself as a subject—an integrated being—by virtue of being in a world, the appearance of the subject to itself also depends on there being a world. “Through habits formed in intercourse with the world, we also in-habit the world,” wrote Dewey, and the world “...becomes an integral part of the self that acts and is acted upon” (1934, p. 104).

Pre-reflective Intelligence

As Nietzsche complained in the late 1800s, a “ridiculous overestimation . . . of consciousness” has cultivated the impression “...that it constitutes the kernel of man; what is abiding, eternal, ultimate, and most original in him” (1882/1887, p. 85). His account of how this impression took hold is complicated, and at some points debatable. However, as a matter of historical record, there is no doubt that consciousness has enjoyed an elevated status in modern western culture; that great human feats—

particularly feats of intelligence—have ubiquitously been attributed to the power of consciousness; and that the conscious, thinking mind has been popularly conceived as the dwelling place of the “I am” or the self, a view Descartes succinctly expressed with the slogan: I think, therefore I am.

The notion that intelligent activity is quintessentially conscious activity troubled Dewey. It did so, first, because he regarded the notion as patently false; and, second, because he believed it engendered sceptical theories of knowledge that lead to the confused question of how it is that we can ever get outside our own private consciousness so as to come to know the world. “As long as theories of knowledge are framed in terms of organs assigned to . . . consciousness,” wrote Dewey, “there will continue to exist such generalized skeptical philosophies” (1929b, p. 193). Against the view that “knowing” is essentially an internal conscious process, Dewey asserted that “knowing is literally something which we do” (1916, p. 331). This account, as will be discussed in this section, has been reinforced by contemporary psychological research and also by the work of leading twentieth century philosophers such as Wittgenstein and Heidegger.

That life is largely composed of pre-reflective doings and that these doings are intelligent is demonstrated nearly everywhere, and yet nearly everywhere ignored. We assume, for example, that the activities of great composers, chess players and surgeons are highly reflective when, in fact, such individuals report operating “without conscious thinking” (Dietrich 2004, p. 749). It is actually when obstacles prevent us from handling tasks competently—which is to say, intelligently—that we tend to become most reflective (see Dewey 1925, p. 314). Wittgenstein wrote that people learning to read painstakingly

“spell words out,” and “[i]f we think of *this* sort of reading, . . . we shall [indeed] be inclined to say: it is a special conscious activity of mind” (1953, §156). Yet for the literate, reading mostly just happens. Along similar lines, Heidegger noted that we use tools automatically and with little thought, and that tools tend to become objects of contemplation only when they breakdown (1927, pp. 103-104/73-74). It is when tasks progress poorly, when we confront difficulties in our practical or personal lives that we stop to think and ruminate.

As Wittgenstein (1953) observed, “[t]he grammar of the word ‘knows’ is evidently closely related to that of ‘can’, ‘is able to’. But also closely related to ‘understands’ (‘Mastery’ of a technique,) [sic.]” (§150). A mathematics student says: “‘Now I can go on, I mean I know [and understand] the formula,’ as we say, ‘I can walk, I mean I am already strong enough’” (§183). The student, moreover, often acquires mathematical strength through repeated drill, and as a trained boxer reflexively answers blows, the student almost reflexively answers questions. The student’s hand dances across the paper scrawling out computations. Consciousness does not direct the specific contractions and extensions of muscles, nor, if the student is skilled, does it play much of a role in directing what gets laid down on the page. Numbers, variables and equations pour forth at a rate exceeding the relatively narrow capacity of the conscious mind.

The conscious mind’s narrow capacity, though seldom acknowledged, is fairly evident. People can only keep a small number of things in mind at a given moment—between five and nine items is established as typical (Miller 1956), though the number

may be even less (Cowan 2001).¹⁶ And although language and mathematics—things particularly associated with consciousness, albeit somewhat misleadingly—are presumed complex, they are arguably among the simplest human activities. Computer science provides an excellent illustration. For decades computers that process mathematical problems and written language have been ubiquitous. As yet, however, no computerized robot possesses anything like the perceptual-motor capabilities of humans, and not simply because the mechanics are lacking, but because the computational complexity is staggering:

Consider, for instance, what it would take to write a computer program that specifies each muscle twitch in the correct order and intensity to make a world-class tennis serve. The computational difficulty of complex motion is enormous, a fact that is readily recognized by the artificial intelligence community (Dietrich 2004, p. 752).

The author of this passage added that one need not seek world-class athletes to discover the “mind-boggling complexity” of motor-skills (p. 754). Even the movement of squirrels defies computation, for at any given instant, “...the number of possible next moves is so astronomically high that future projections would quickly bifurcate into infinity” (p. 755).

Psychologists have debated the notion of pre-reflective intelligence or “unconscious cognition,” a controversy that one psychologist framed in terms of the question: “How smart is unconscious cognition? Compared to conscious cognition, is it smart or dumb?” (Greenwald 1992, p. 768) A couple of things stand out about how

¹⁶ There is often little point in providing page references when citing findings from a scientific article, for in many cases the article as a whole is the report of the findings. In such cases, I simply reference authors and dates.

psychologists have responded to the question. First, there is no consensus. Answers range from “not very smart” (Bruner 1992) to “it depends” (Kihlstrom, Barnhardt & Tatarzyn 1992) to “extremely smart” (Lewicki, Hill & Czyzewsk 1992). Second, psychologists have arrived at these disparate views despite having the same basic empirical data at their disposal. This suggests that the controversy is largely a conceptual matter—a debate about what “intelligence” means. If we relinquish definitions that restrictively locate intelligence in the consciously thinking mind, then we relinquish any serious doubt that many intelligent activities are carried out in unconscious, semi-conscious, automatic, habitual and other pre-reflective ways. If, by contrast, we cling to such definitions, then we are forced, by definition, to grant the dubious conclusion that great composers, chess players and surgeons exercise their intelligence least when performing the very tasks that have won them the accolade: “genius.”

None of this is to say that consciousness is utterly unrelated to intelligent action and knowledge. By most accounts, consciousness helps us respond flexibly and intelligently when the novel and unexpected obtrude. By most accounts, it also participates in the acquisition of new knowledge. And whatever the ultimate resolution to the debate over epiphenomenalism may be, it is hard to imagine “intelligent conversations” in the absence of consciousness. The point is not that intelligence vanishes when consciousness arrives, but rather that intelligent activities need not be highly reflective. In practice, “intelligence” names certain kinds of purposeful handlings, as does “knowing,” and both persist regardless of whether they be highly reflective. In the words of Dewey (1929b):

...we may say that the worth of any object that lays claim to being an object of knowledge is dependent upon the intelligence employed in

reaching it. In saying this, we must bear in mind that intelligence means operations actually performed in the modification of conditions, including all the guidance that is given by means of ideas, both direct and symbolic. (p. 200).

Hence the difference between the conventional modern Western view of intelligence and knowledge and that of Dewey is not that the former grants the existence of private thoughts, mental representations and suchlike, while the latter denies it. Instead,

[t]he essential difference is that between a mind which beholds or grasps objects from outside the world of things, physical and social, and one which is a participant, interacting with other things and knowing them provided the interaction is regulated in a definable way (pp. 200-201).

Dewey allowed that conscious processes play a role in generating knowledge. He only pointed out that they do so by regulating interactions in the world, and furthermore, that patterns of interaction often constitute basic patterns of conscious thought. So while we have inner experiences, there is never really a question of how we get outside our own private consciousness so as to come to know the external world.

An additional point worth emphasizing is that Dewey regarded purposeful action as a pre-condition of there being intelligence and knowledge, and purposes, on many accounts, are dependant on consciousness. Yet purpose driven actions are still actions in the world. It may be that certain phenomena—certain changes or effects in the world—would never come into appearance were consciousness not there to direct certain purposeful interactions. However, this does not make such phenomena any less objective. It merely reiterates the point that it is through worldly interactions and interrelationships that objects come into appearance.

Body-Mind

In his 1945 *Phenomenology of Perception*, Merleau-Ponty developed a concept that has come to be known as the “body-subject.” The concept has been widely discussed by Merleau-Ponty’s admirers, and both he and they use it to emphasize that consciousness, perception, experience, knowledge and self—in short, the phenomenon of subjectivity and mind—are not separate from or opposed to the body, but rather found in and through embodied patterns of acting and interrelating in the world (see pp. 408-409). Twenty years earlier, in *Experience and Nature* (1925), Dewey introduced a comparable but largely ignored concept of “body-mind,” which he similarly used to redress confused ways of thinking and speaking that divide “...the body and mind from each other, making separate existential realms out of them...” (p. 284).

Dewey explicated the term “body-mind” by breaking it into its constituent parts. He explained that “body” here refers to “...the continued and conserved, the registered and cumulative operation of factors continuous with the rest of nature, inanimate as well as animate” (1925, p. 285). It refers to a lived process—a lived process, for example, of actions settling into habits, of capacities coordinating around things in the world and vice versa. “Mind,” in turn,

...denotes every mode and variety of interest in, and concern for, things: practical, intellectual, and emotional [sic.]. It never denotes anything self-contained, isolated from the world of persons and things, but is always used with respect to situations, events, objects, persons and groups. Consider its inclusiveness. It signifies memory. We are *reminded* of this or that [emphasis added]. Mind also signifies attention. We not only keep things in mind, but we bring mind to bear on our problem and perplexities. Mind also signifies purpose; we have a mind to do this and that. Nor is mind in these operations something purely intellectual. The mother minds

her baby; she cares for it with affection. Mind is care in the sense of solicitude, anxiety, as well as active looking after things that need to be tended; we mind our step, our course of action, emotionally as well as thoughtfully. [...]

Mind is primarily a verb. It denotes all the ways in which we deal consciously and expressly with situations in which we find ourselves (1934, p. 263).

Mind, then, is "...indicative of features which emerge when 'body' is engaged in a wider, more complex and interdependent situation" (1925, p. 285), and the activity of "minding" things "is the activity of the body-mind organizing itself and the world around and within it..." (Wilshire 1993, p. 264). The hyphenated term "body-mind" consequently "...designates what actually takes place when a living body is implicated in situations of discourse, communication and participation" (1925, p. 285).

Dewey's concept of "body-mind" arose in the context of Dewey's ongoing efforts to circumnavigate the debate between rationalists and empiricists (e.g., 1906, pp. 469-475; 1920 pp. 81-91; 1922 pp. 30-31)—the debate, to put it crudely, about whether the mind imposes form on the world or whether it is the other way around. Against rationalists, Dewey (1922) argued that our ways of cognizing worlds follow from our ways of inhabiting them, which is to say, from our habits. To a significant extent, therefore, habit precedes thought. "Ideas . . . are not spontaneously generated. There is no immaculate conception[,]" he wrote. "Reason pure of all influence from prior habit is a fiction" (pp. 30-31). But so too are the "pure sensations" of empiricists, for they "are alike affected by habits" (p. 31). Empiricists, Dewey went on to say,

...who attack the notion of thought pure from the influence of experience, usually identify experience with sensations impressed upon an empty

mind. They therefore replace the theory of unmixed thoughts with that of pure unmixed sensations as the stuff of all conceptions, purposes and beliefs. But distinct and independent sensory qualities, far from being original elements, are the products of a highly skilled analysis[...]. To be able to single out a definitive sensory element in any field is evidence of a high degree of previous training, that is, of well-formed habits. A moderate amount of observation of a child will suffice to reveal that even such gross discriminations as black, white, red, green, are the result of some years of active dealings with things in the course of which habits have been set up. It is not such a simple matter to have a clear-cut sensation. The latter is a sign of training, skill, habit (p. 31).

In sum, Dewey attacked rationalists for not being empiricists, that is, for not recognizing the priority of experience; yet this is, strange to say, also why he attacked empiricists. “Our ideas,” he writes, “truly depend on experience, but so do our sensations. And the experience upon which they both depend is the operation of habits” (p. 32).

Having said that Dewey criticized both rationalism and empiricism, it should also be noted that he sympathized somewhat with the rationalistic view that the world has structure that conforms to the structure of mind; that it is because of this that the world is an object of possible knowledge; and that it is by virtue of minds sharing the same structure that minds come to have similar experiences of the world, making the it an object of shared knowledge. However, whereas rationalist proposed that the world conforms to the structure of mind because the mind imposes rational structure on the world or because the world is an expression of the rational mind of God, Dewey contended that the conformity can be accounted for in a much less esoteric way. “The world is subject-matter for knowledge, because [the body-mind] has developed *in* that world” (1925, p. 277). More than this, the body-mind is itself a participant in and contributor to the patterns of acting, interrelating and habits that constitute the structure

of worlds. As Dewey explained elsewhere, “habits”—and therewith the self or body-mind—“incorporate an environment within themselves,” and in this sense conform to it. Yet they also bring the environment into conformity with themselves. “They are adjustments *of* the environment [or world], not merely to it” (1922, p. 52). It is to be expected, therefore, that the “...body-mind . . . will . . . find some of its structures to be concordant and congenial with nature, and some phases of nature with itself” (1925, p. 277; also see 1929b, pp. 208-222).

When it came to the more specific question of how the world becomes an object of shared knowledge, Dewey granted the rationalist claim that we share certain native capacities; he also granted the empiricist position that we are sometimes exposed to similar environments. Yet he added that many of our shared capacities are not native, but acquired through participating in shared cultures or worlds. He also noted that we often expose ourselves to similar environments by virtue of jointly contributing to shared cultures or worlds. This line of argument related to his claim that experience is almost equivalent to culture. Dewey (1922) explained that the problem of how we come to have shared knowledge is only a problem “[i]f we start with the traditional notion of mind as something complete in itself...” (p. 61). If we do this, “...then we may well be perplexed by the problem of how a common mind, common ways of feeling and believing and purposing, comes into existence...” (p. 61). The problem is largely resolved, however, “...if we recognize that in any case we must start with grouped action” (p. 61)—if we recognize, that is to say, that experience depends on the operation of habits, and habits on

worlds or cultures and vice versa, and further recognize that worlds or cultures are, by definition, shared.

It has been noted that many philosophical problems are not genuine problems, but conceptual misunderstandings that arise from asking the wrong questions. For Dewey, the question of how we can get outside the mind so as to have knowledge of the world was such a case. The crucial point to remember, he wrote, is that “[a]ny account of experience must . . . fit into the consideration that experiencing means living; and that living goes on in and because of an environing medium, not in a vacuum” (1917, p. 8). While this is—or at least should be—obvious,

...this fact is . . . ignored and virtually denied by traditional theories. Consider for example, the definitions of life and mind given by Herbert Spencer: correspondence of an inner order with an outer order. It implies there is an inner order and an outer order, and that the correspondence consists in the fact that the terms in one order are related to one another as the terms or members of the other order are connected within themselves. . . [B]ut the genuine correspondence of life and mind with nature is like the correspondence of two persons who “correspond” in order to learn each one of the acts, ideas and intents of the other one, in such ways as to modify one’s own intents, ideas and acts, and to substitute partaking in a common and inclusive situation [or world] for separate and independent performances. . . . The aim is not to protract a line of organic events parallel to external events, but to form a new scheme of affairs to which both organic and environmental relations contribute, and in which they both partake (1925, pp. 282-283).

Recognize this, declared Dewey, “...and the problem of how a mind can know an external world or even know that there is such a thing” becomes analogous to “...the problem of how an animal eats things external to itself; it is the kind of problem that arises only if one assumes that a hibernating bear living off its own stored substance

defines the normal procedure...” (1925, p. 278). Change the assumption, “...and the problems in question cease to be epistemological problems” (1925, p. 265).

By asking the question of how we can get outside the mind so as to have knowledge of the world, we tacitly assert that “mind” denotes an exclusively inner phenomenon when, according to Dewey, it actually “...denotes [a] whole system of meanings as they are embodied in the workings of organic life” (1925, p. 303). Dewey did not settle the aforesaid question by answering it. Instead, he dismissed the question as a confusion, as the wrong question to ask. If body-minds are, in effect, world-transactions developed over time; if “...knowing is not the act of an outside spectator but of a participator inside the natural and social scene inside” (1929b, p. 196); if, in short, “...the assumption that experience is something set over against the world is contrary to fact, then the problem of how self or mind or subjective experience or consciousness can reach knowledge of an external world is assuredly a meaningless problem” (1917, p. 31-32).

-Six-

Aesthetic Experience

In the same way that Heidegger asserted that we become especially reflective when equipment fails, Nietzsche conjectured that cultures under siege become increasingly cognitivist. As an example, he noted that Socrates and Plato—founding figures in the contemplative traditions of the west—were present when Athens was exhausted, broken and finally defeated by the decades-long Peloponnesian war (see 1888, p. 478). While Nietzsche's example and the claim it supports are admittedly speculative, the claim is worth exploring in the context of Dewey's criticism of the modern western emphasis on inner experience. It is, first, because Dewey almost came to equate experience to culture; second, because he suggested that historical obstacles, which is another way of saying cultural obstacles, led to the overemphasis of inner experience; and, third, because Dewey was a lifelong social activist, and his writings on experience were, among other things, forms of cultural criticism.

Nietzsche described breakdown as a form of illness; and illness, understood as breakdown, entails dis-integration. In a book on Dewey's *Art as Experience*, Victor Kestenbaum (1977) accordingly described illness as a condition in which "...the integration or interpenetration of habits has been destroyed" (p. 27). He went on to say:

If the experience of illness involves a loss of integration of organic habits and a resulting loss of integration with the environment, then aesthetic experience is an intensification of the integration of habits and also an intensification of the organism's integration with the environment (p. 27).

In other words, aesthetic experience not only integrates together like an artistic composition; it also involves a “self-world integration” (p. 27), a diminution and perhaps extinction of the divide between “inner” and “outer.”

While it may seem that this sort of experience is highly exceptional, Dewey actually composed *Art as Experience* (1934) in hopes of showing that aesthetic experience is commonplace (p. 7), or at least that it should be. He expected hostility to this project. Yet in the same way that Nietzsche asserts that hostile attitudes towards life—claims about its worthlessness and so on—reflect the unhealthy life lived by those making the claims (see 1888, pp. 473-479), Dewey contended that “[t]he hostility to association of fine art with normal processes of living is a pathetic, even a tragic, commentary on life as it is ordinarily lived. Only because life is usually stunted, aborted, slack, or heavy laden, is the idea entertained...” (p. 27). Here and elsewhere he suggested that the experience of being insulated within our own individual spheres of private consciousness—an experience contrary to aesthetic experience—follows from the fact that we live in alienating and oppressive conditions, which is to say, sick cultures.

But something is missing from the account I have so far offered, for pronounced individuality, heightened consciousness and rebellion against engrained cultural habits are emphatically associated with artists and their works. Dewey, in fact, recognized this. He recognized that doings and undergoings that constitute experience are, in degree to which experience is rich and meaningful, “...a union of the precarious, novel, irregular with the settled, assured and uniform—a union,” he added, “which also *defines the artistic and esthetic*” (1925, p. 358; emphasis added; also see 1922, pp. 178-179). He

recognized, therefore, that aesthetic experience not only involves a heightened level of integration, but also an interruption of it, albeit not an outright shattering of it. It involves, that is to say, a re-shaping, re-directing and expanding of certain entrenched ways of experiencing, interacting and putting things together. Dewey recognized, moreover, that aesthetic experience of art involves a heightened level of conscious awareness—awareness in which and through which we come to see things more clearly, to see them in a new light and even to see things that have heretofore been invisible to us (see 1934, pp. 170-175). Indeed, this is something that Plato—who was arguably an artist as well as a philosopher—achieved when he composed dialogues against a backdrop of social upheaval; and this is also something that his teacher Socrates—that “gadfly” of Athens—did: he challenged custom and convention, pricking, stinging and thereby awakening that “noble” but “somewhat sluggish” beast called Athens (Plato, *Apol.* 30e).

That highly entrenched habits are obstacles to having an aesthetic experience suggests that they too can be characterized as forms of illness that cut people off from worlds. Consider, for instance, people with obsessive fixations. As with other individuals, they deal with things in habitual ways—ways, however, that are singularly narrow and unbending. A fixated condition is commonly understood as a psychological illness, and there is a sense in which fixated individuals “lose touch with reality.” After all, if habits constitute experience, then narrow sets of habits bring about narrow experiences. They instill tunnel vision, that is, a blindness to the “big picture,” an inability to see things in new ways. They also cultivate a tendency to experience too much of the world in terms of the fixation. Thus, to repeat an earlier example,

pathologically angry people perceive slights where none have occurred. The sheer routine of unbending habits, moreover, leads to what Dewey called “absentmindedness” (see 1922, p. 173), for minds trapped in the drudgery of sheer routine tend to withdraw from immediate situations and wander into “their own little worlds.” Unbending habits also amount to illness in the sense that they translate into a failure to grow and adapt. When threatened by new ideas, we may pour our powers into *preserving* traditional outlooks, so that we become inflexible, limiting growth in both others and ourselves. Nietzsche compared endless preservation to embalment and mummification (see 1888, pp. 479-480), and Heidegger, summarizing Nietzsche, wrote that “...life that restricts itself to mere preservation is already life in decline” (c. 1943, p 73). Dewey similarly claimed that if we merely maintain the gains we have already made, then “our experience” and therewith our contact with the world “perishes of inanition” (1934, p. 56).

So far I have mostly considered perception, experience and subjectivity as phenomena that arise when our doings and undergoings are integrated through the action of our being in the world. In the remainder of this work, I do not abandon this position. In fact, I begin by emphasizing the various ways in which aesthetic experience involves heightened levels of integration. However, I will also emphasize how Dewey’s philosophy of art supplements and qualifies the aforementioned position. I will particularly strive to show how, on his account, the union between the settled and the irregular which characterizes the artistic and aesthetic is also indicative of conditions

under which we expand our worlds, our experiential horizons, thereby gaining a more encompassing and perspicacious vision of things.

Art as Experience: An Overview

Dewey did not open *Art as Experience* (1934) by offering a theory of aesthetics. In a vein similar to Robin Collingwood, who held that we confuse ideas by ignoring the historical context in which they developed, Dewey began the book by arguing that art is misunderstood because modern society isolates it “from the human conditions under which it was brought into being” (p. 3). He wrote:

An instructive history of modern art could be written in terms of the formation of the distinctively modern institutions of museum and exhibition gallery. . . . [In the modern era, e]very capital must have its own museum . . . devoted in part to exhibiting the greatness of its artistic past, and, in other part, to exhibiting the loot gathered . . . in conquest of other nations[.] . . . They testify to the connection between the modern segregation of art and nationalism and militarism. [...]

The growth of capitalism has [also] been a powerful influence in the development of the museum as the proper home for works of art, and in the promotion of the idea that they are apart from the common life. The *nouveaux riches*, who are an important by-product of the capitalist system, have felt especially bound to surround themselves with works of fine art which, being rare, are also costly (p. 8).

Today, Dewey went on to say, we cloister art in showrooms much as clerics hide secret rites in temples (p. 9). This bestows an unearthly status on art, a felt distance between it and “...the interests and occupations that absorb most of the community’s time and energy” (p. 9). Globalization magnifies this distance. “The mobility of trade and of populations . . . [undermines] the connection between works of art and the *genius loci* of

which they were once a natural expression” (p. 9). “Objects that were in the past valid and significant because of their place in the life of a community now function in isolation from the conditions of their origin. By that fact they are also set apart from common experience...” (p. 9).

The problem, for Dewey (1934), is that we do not merely record this chasm, but accept it as natural. Against this, he insisted “...that *theories* which isolate art and its appreciation . . . in a realm of their own, disconnected from other modes of experiencing, are not inherent in the subject-matter, but arise because of specifiable extraneous conditions” (p. 10). Yet because these conditions are so embedded “in institutions and habits of life,” we assume them to be “embedded in the nature of things” (p. 10). We forget that many museum pieces were once implements of everyday life (p. 6), and others, while not tools, were nonetheless a “part of the significant life of an organized community” (p. 7). By separating “...artistic objects . . . from both conditions of origin and operation of experience,” we build “a wall . . . around them that renders almost opaque their general significance...” (p. 3). This impoverishes our appreciation of artistic objects. Since aesthetic theories are modelled upon such objects, it also degrades our understanding of aesthetic experience.

Although *Art as Experience* (1934) begins with an account of how social conditions and historical insensitivity corrupt our understanding of art, Dewey did not write the book in order “...to engage in an economic interpretation of the history of the arts” (p. 10). He included the historical discussion, however, because it defined “the nature of the problem” with which he is concerned: “that of recovering the continuity of

esthetic experience with normal processes of living” (p. 10). From the outset, Dewey stressed that experience, including aesthetic experience, is transactional: “...it signifies active and alert commerce with the world; at its height it signifies complete interpenetration of the self and the world of objects and events” (p. 19). He also stressed that worldly transactions integrate into aesthetic experience through a kind of lived historical process. As he put it later in the book, “...experience is a product, one might almost say a by-product, of continuous and cumulative interaction of an organic self with the world” (p. 220).

Dewey (1934) thus treated aesthetic experience as a sub-category of what his earlier works called experience in the vital sense. This means the family of features characterizing the latter also characterize the former. As the two are not mere equivalents, however, it also means the former encompasses something more. Aesthetic experience is more integrated than generic experience in the degree to which it hangs together, involves mutual adaptation of subject and object and unites the subject’s capacities into joint action. As with experience in general, it entails creative and active engagement, reconstruction and transformation, yet here too in higher degree. An aesthetic experience is occasioned by what might loosely be called a heightened sense of reality: it “...is defined by those situations and episodes that we spontaneously refer to as being ‘real experiences’” (p. 36). It has a singular quality: it stands out as unique; it stands as a kind of unified whole; and it is literally the sort of experience that we speak of in the singular, as when we say, “that was *an* experience” (see pp. 35-36). It has a kind of revelatory character. In developing a heretofore unseen style, 19th century impressionist

painters learned to experience and reveal the effects of light in new ways; and their paintings challenge many viewers into a richer sense of what light is. Along these lines, Dewey remarked that an aesthetic experience often stands as “an enduring memorial” of what some kind of thing or event may be (p. 36). His concept of an aesthetic experience may be summarized thus: it is an experience that builds dramatically in time, culminating into a coherent whole, yet a whole within which and through which things are transformed into sharper and more meaningful forms.

Having *an* Experience

Anything that can be called “experience” in Dewey’s sense of the term has a basic level of integration. Suppose a cross-country skier thrusts her poles and edges her skate-skis into snow. In consequence of this doing, of this combination of actions directed at the environment, her body undergoes motion. It propels forward. She keeps repeating the same actions, each time undergoing forward motion. Her doings and undergoings fall into a rhythmic connection of “means-consequence.” Integrated experience is the result.

While this basic level of integration is a precondition of experience, it is not sufficient for “having *an* experience,” a phrase Dewey (1934) used to describe an aesthetic experience. He wrote: “...we have *an* experience when material runs its course to fulfillment. Then and then only is it integrated within and demarcated in the general stream of experience from other experiences.” Such an experience “...is rounded out so that its close is a consummation and not a cessation.” It “...is a whole and carries with it its own individualizing quality and self-sufficiency. It is *an* experience” (p. 35).

Imagine, for example, that the aforementioned woman goes skiing on a day when the sun shines; when fresh snow sparkles on pine bows; when birds sing, and squirrels scurry; when the air is refreshingly crisp, but not biting cold; and when the ski conditions are optimal. The trail has interesting twists and turns, ups and downs; sometimes it burrows through snow-laden trees, sometimes through meadows; at one point it crests a steep hill and comes upon a breathtaking view; at another point it wanders alongside a gurgling creek. Some portions of the trail are demanding; others are traveled with ease. Imagine further that the woman is engrossed in the activity of skiing through this varied environment. Her mind does not wander to the office meeting she has tomorrow or to the books she forgot to return to the library yesterday. She “loses herself” in the environment with which she interacts.

A first point to note is that this experience stands out from the general stream of day-to-day experience. It also stands out from the woman’s general experience of skiing in the past. It is an enduring memorial to what skiing can be. A second point to note is that the woman is especially integrated with her environment. Under normal circumstances, her bodily movements coordinate around her interactions with the trail, but her attention often drifts elsewhere. On this day, her movements, her perceptual faculties, nearly her entire conscious self coordinates and engages with the things she encounters. A third point to note is that her experience has a highly dramatic structure. Shifts between demanding and less demanding portions of the trail introduce rhythms of tension and repose, and variations in scenery introduce mini-climaxes. A particular highlight is the view she discovers after struggling so hard to crest the steep hill. For

these reasons, her experience stands out as *an* experience. To re-quote Dewey (1934), it is “demarcated in the general stream of experience from other experiences” (p. 35). It is highly integrated. It runs “its course to fulfillment” (p. 35), or rather a series of fulfillments, with especial highlights. As with focal points in a painting, these fulfillments and highlights pull the experience into a unified whole that “carries with it its own individualizing quality and self-sufficiency. It is *an* experience” (p. 35).

Though the experience just described does not involve an encounter with an object of fine art, Dewey, as one commentator has summarized his position, maintained that

...the arts provide us with exemplary instances of *an* experience. They do so, moreover, viewed from the standpoint of either the artist or the audience. From the artist’s point of view the experience is chiefly one of making or doing something that culminates in an object or a performance. From the viewpoint of the audience or the reading public the task is one of interpretation, of making sense of the artist’s accomplishment. . . . In either case, the experience, when successful—when it truly is *an* experience—is characterized at its close (and often periodically during its course) by feelings of satiety and fulfillment (Jackson, 1998, p. 4).

The author of this passage, Philip Jackson (1998), further explained that what makes such experiences special “...is not simply that their parts hang together to form a whole. Nor is it simply that we find them to be momentarily satisfying. What adds to their importance are the enduring changes they produce. They leave in their wake a changed world” (p. 5)—a point the next chapter will particularly pursue.

Formal Conditions of Aesthetic Experience

Some one hundred pages after describing what it means to have *an* experience, Dewey (1934) outlined “formal conditions of esthetic form,” initially identifying them as “continuity, cumulation, conservation, tension and anticipation” (p. 138). Some of these conditions overlap with one another, and the Dewey allowed that additional conditions might be added, all of which is to say: it presents the list not as a definitive scheme, but rather as a useful rubric. The list is useful, first, because it clarifies why *an* experience falls within the domain of what has traditionally been called aesthetic experience; second, because it thereby helps us to see how the former sheds light on the latter; and, third, because it helps us to see how studying aesthetics can augment our understanding of human experience in general.

The first of the formal conditions—continuity—involves factors “that endure through change” or at least change “more slowly than do surface incidents, and thus are, relatively constant” (1934, p. 323). For Dewey, habits are chief among these factors. The earlier mentioned cross-country skier, to consider an example, encounters snow conditions that vary wildly from day to day and even with different portions of the trail she encounters in a single day. Yet she also enters each encounter already equipped with a range of relatively stable habits—the techniques of one-skate, two-skate and offset, for instance. This does not mean that she employs the habits in a mechanized and unbending way, for a “habit,” as Dewey (1922) employed the term, is not a conditioned reflex, but “an ability, an art, formed through past experience” (p. 66); it is, in other words, an “acquired skill” (p. 64), and part of what makes a skill a skill is the fact that it can be

adapted to different circumstances. A skilled guitarist can handle instruments with different widths of neck, and the woman can adapt her skills to different conditions. In this way, the guitarist and skier both expand and modify their habits, so that their habits grow “more adaptable by practice and use” (p. 72). Yet because habits are literal embodiments of past experiences, they carry the past into the present. The skier does not enact a completely new habit for each new condition she encounters in the present—if she did, she would not be employing a habit at all. Instead, she enacts variations of the same habits she has used before. Hence there is continuity in her conduct and therewith in her experience. With something like this in mind, Dewey remarked that “the principle of continuity of experience means that every experience takes up something from those which have gone before and modifies in some way the quality of those which come after” (1938, p. 35).

The point here is that habits help us to experience a kind of unity or coherence in things—whether they be ski trails or paintings—and that this is a pre-condition of us having an aesthetic experience of them. This is, in fact, a point that earlier chapters touched upon. In Chapter Four, it was seen that persistent ways of organized interaction are a means through which we come to have a relatively stable and generalized picture of an object or situation. In Chapter Five, it was seen that our ability to perceive colours depends on habits we have acquired in the past.

The remaining formal conditions—cumulation, conservation, tension and anticipation—also describe conditions under which *an* experience develops and coheres over time. As Jackson has (1998) observed, however, there is a general difference

between continuity and the other four conditions. Continuity involves a process in which embodiments of the past (i.e., habits) structure the development of a current experience. Hence continuity involves factors that exist prior to and in this sense external to the current experience. By contrast, the other formal conditions usually—though not always—refer “...to the *internal dynamics* of what takes place between the onset of the experience and its culmination” (p. 47; emphasis added). Consider, for example, dramatic narratives. Our ability to encounter a play or movie as a unitary phenomenon, as opposed to a mere series of disconnected events, depends partly on what we bring to the encounter—that is, on our acquired habits, native capacities and so forth. Yet it also depends on interrelationships between various constituents within the play, which is to say, the internal dynamics of the narrative.

One of these dynamics is the formal condition of cumulation—a term, according to Jackson (1998), which refers to “[t]he buildup that attends the temporal unfolding of an aesthetic experience...” (p. 48). This buildup may be experienced as an emotional “increase in tension or anticipation” (p. 48). It may also be undergone intellectually as “an increase in the internal complexity of the work or as a deepening of its meaning” (p. 48). In a play, it may be encountered as a rising action, a quickening of pace, a leading and building of one predicament into another until a final crisis is reached; in a painting, as a cyclic movement structured by the ways in which the composition keeps drawing the

eye to increasingly intense portions of the composition, repeatedly leading it to a focal point.¹⁷

The next formal condition—conservation—involves arrangements and organizations through which tension accumulates, becomes pent up. Pauses and extended notes in music or melodic phrases that dance around a tonal centre without landing on it can have this effect, as can obstacles impeding the progress of a movie's protagonist. So too can rhythmic punctuations in a painting—punctuations that temporarily hold the eye, inviting it to dwell upon a portion of the composition before moving on. In such cases, wrote Dewey (1934), “[r]esistance accumulates energy; it institutes a conservation until release and expansion ensues” (p. 155). By temporarily opposing—but not arresting—movement, it absorbs and sums up what came before while simultaneously generating an impulsion to move forward (see pp. 56-57, 155 & 172). For Dewey, conservation also relates to the fact that later phases in an aesthetic experience build upon earlier ones. What the culminating stanza of a poem means has to do with what earlier stanzas mean. In this sense, earlier meanings enter into and are thus conserved within the culmination to which they lead. On a general level, conservation

¹⁷ While the condition of “culmination” fits many artistic experiences, it very likely does not fit them all, for art forms such as atonal music can arguably work against this condition. I am of two minds as to how Dewey would have responded to this objection. On the one hand, he did not present his list as definitive. As a pragmatist, moreover, one would expect him to be open to amending the list and also to accepting exceptions to the rule. On the other hand, Dewey did not attend particularly to *avant-garde* art forms, and I can imagine he might have held that atonal music is a form that thwarts genuine aesthetic experience. I am not sympathetic to this position. Nor am I interested in establishing an absolute boundary on what counts as aesthetic experience. Fortunately Dewey's account is defensible without me doing so, for at the outset of this section I stated that Dewey's conditions of aesthetic form are useful because they clarify why *an* experience falls within the domain of what has traditionally been called aesthetic experience and why the former *helps* us to understand the latter. The aforementioned objection does not undermine this claim.

works in concert with cumulation to establish rhythm and a sense of expectation, “[f]or whenever each step forward is at the same time a summing up and fulfillment [i.e. a conserving] of what precedes, and every consummation carries an expectation tensely forward, there is rhythm” (p. 172).

Thus resistances and internal oppositions within works of art also generate tension, the fourth condition of aesthetic form in Dewey’s list. They create tension by generating expectations while simultaneously thwarting the realization of expectations for a time. Not only does this heighten our emotional engagement with things we encounter aesthetically; it also gives our experiences a kind of solidity and substance they would not otherwise have. Put another way, internal opposition and tension allow for the appearance of well-defined form. The Sun, to consider an analogy, is a fairly distinct entity because the inward pull of gravity is met by the outward push of kinetic energies and nuclear forces. Where the former not there to oppose the latter, the Sun would dissipate into an indistinct haze, and were the latter not there to oppose the former, it would collapse into an equally indistinct point-like object. So similarly in life and art. In life, we face problems that prevent us from immediately reaching an expectant goal; in a movie, a protagonist hits obstacles that have the same basic effect; and in a painting, there are lines, colours and suchlike that not only lead the eye towards a focal point, but also away from it, so that it engages with other portions of the canvas. This simultaneous pulling towards and pushing away from fulfillments is, on Dewey’s (1934) account, a pre-condition of having an aesthetic experience, for without this sort of “...internal tension there would be a fluid rush to a straightway mark; there would be nothing that

could be called development and fulfillment” (p. 138). Consequently our experience would not be *an* experience, for it would not integrate into a single, dramatic form.

Dewey offered only vague descriptions of anticipation, the last formal condition in his list. It is, however, a condition that arguably parallels what contemporary environmental theories of aesthetics call “mystery”—an allure that comes from things being partly hidden. Some Japanese gardens employ this basic principle. The view is never completely obstructed, yet never completely open. No matter where one stands, one can never see the entire garden. With something always left a little uncertain, hidden beyond the next bend in the trail, one is continually drawn further along through the setting. So similarly with other forms of art. Portions of a painting may perplex viewers, leaving them a little uncertain, thereby drawing them into it. A movie may hold attention by providing hints about how the story may conclude, while simultaneously not giving the ending away.

The role of anticipation in aesthetic experience may also be understood by considering its relation to the other four conditions in the list. It relates to the first condition because the habits that bring continuity to experience also instill future expectations. As discussed in the last chapter, habits are inclinations to move towards, seek, want and chase after something; these inclinations are future oriented and in this sense anticipatory. Habits, moreover, embody expectations that certain things and circumstances can be handled in certain ways. Thus, for example, the habits of the earlier mentioned woman anticipate certain kinds of interactions with the ski trail. Anticipation relates to the second condition of aesthetic form—cumulation—because the buildup that

attends the dramatic unfolding of an aesthetic experience is, by virtue of being dramatic, also a building of expectations. Anticipation relates to the third condition—conservation—because artistic works establish patterns of temporal unfolding, along with a base of accrued meanings. These patterns and meanings are conserved in the sense that they stay with us, and in staying with us, they shape our expectations of what is to come. Anticipation also relates to the internal opposition and resistance that characterize both conservation and tension. It does so because opposition and resistance produce rhythmic variations in pace and intensity, and these fluctuations, according to Dewey, “...in differentiating a part within the whole, [add] to the force of what went before while creating a suspense that is a demand for something to come” (p. 1934, p. 155).

A few additional points are worth mentioning. First, as a way of being concerned with and interested in what is to come, anticipation is a form of emotional engagement; and insofar as all the formal conditions of aesthetic form involve anticipation, all stand as ways in which we engage emotionally with things. Second, anticipation is a way of reaching beyond the confines of the instantaneous here and now. Anticipation, moreover, reaches in two directions, for it is not just a looking forward, but a looking forward that builds upon and follows out of what has already come to pass. As such, fluctuations in intensity and other dynamics are not—insofar as they are anticipatory—isolated variations. In the words of Dewey (1934), they are instead “...modulation[s] of . . . entire pervasive and unifying qualitative substratum[s]” (p. 155). And again, since all the formal conditions of aesthetic form involve anticipation, all are ways in which we come to have temporally extended, unified experiences of things—ways, in other words, in

which we come to have what Dewey called “*an* experience.” A third point to note, however, is that fluctuations, variations and other rhythmic modulations do not merely unify an artistic work. They also “accentuate and define” phases within a work (p. 173), thereby individuating them. Yet this too contributes to the overall unity of the work and our experience of it, for “[t]he series of doings in rhythm of experience gives variety and movement” (p. 56). It saves the work “from monotony and useless repetitions, from degrading into “the aimlessness of a mere succession of excitations” (pp. 56-57)—a mere succession that is antithetical having *an* experience.

Perception Revisited

The formal conditions of aesthetic form capture prominent characteristics of the experience of the earlier discussed skier. However, there is something about her experience they do not particularly emphasize, namely, that her movements, her perceptual faculties and an array of other capacities coordinate and synchronize around the environment she encounters. This aspect of her experience is crucial to what Dewey meant by his concept of *an* experience. It is also crucial to his general account of perception—and, as will be seen, a parallel account Merleau-Ponty advanced during the last decade of Dewey’s life. It shows that perception—especially aesthetic perception—is synaesthetic, and it provides a remarkably concrete explanation as to why it is. It also reinforces why we should be wary of the old saw that perception is easily deceived. It thereby emphasizes the anti-sceptical nature of Dewey’s philosophical project.

Merleau-Ponty (1945) noted that “Cézanne declared that a picture contains within itself even the smell of a landscape” (p. 318).¹⁸ He argued that Cézanne meant by this that the painting reflects “...responses which would be elicited through an examination by the remaining senses; that a thing would not have this colour had it not also this shape, these tactile properties, this resonance, this odour...” (p. 319). The lesson he drew from this is that “a phenomenon” that mobilizes only one of our senses “is a mere phantom,” and that “it will come near to real existence only if . . . it becomes capable of speaking to [our] other senses” (p. 318). Thus, to consider another example, seeing a flickering orange candle flame *as a candle flame* might also mean seeing it as something hot, something with a waxy smell, something with an intimate emotional resonance. By contrast, to register an isolated fluttering patch of orange—a pure visual sensation disconnected from anything else—is to suffer something tantamount to the haloling effects and other phantom sensations that people with migraine headaches sometimes endure, all of which is to say: isolated sensory excitations are not perception.

In *Art as Experience* (1934), Dewey developed a very similar position. He wrote that

[t]he eye, ear, or whatever, is only the channel *through* which a total response takes place. A color as seen is always qualified by implicit reactions of many organs... It is a funnel for total energy put forth, not its well-spring. Colors are sumptuous and rich just because a total organic resonance is deeply implicated in them (p. 122).

So while “[w]e see a painting *through* the eyes, and hear music *through* the ears,” it is a mistake to suppose that

¹⁸ Merleau-Ponty references Gasquet (1929) *Cézanne*, p. 81.

...visual or auditory qualities as such, are central if not exclusive. . . . Nothing could be further from the truth. . . . It is no more true of seeing a picture than it is of reading a poem or a treatise in philosophy, in which we are not aware in any distinct way of the visual forms of letters and words. These are stimuli to which we respond with emotional, imaginative, and intellectual values, which then are ordered by interaction with those presented through the medium of words. The colors seen in a picture are referred to objects, *not* to the eye” (p. 123).

Thus we can “...perceive, by means of the eyes as causal aids, the liquidity of water, the coldness of ice, the solidity of rocks...” (p. 123). We can do this, as Dewey suggested in the above passage, because we primarily experience things and events, not sensations, and the qualities of things and events are never purely visual. When we see by means of the eyes, therefore, “...it is certain that other qualities than those of the eye are conspicuous and controlling in perception” (p. 123). It is also “...certain . . . that optical qualities do not stand out by themselves with tactual and emotive qualities clinging to their skirts” (pp. 123-124).

On this account, perception is not merely an *intersensory* phenomenon, for motor, intellectual and emotional modalities work with traditional *sensory* modalities of perception. As “...organs through which the live creature participates directly in the ongoings of the world,” wrote Dewey (1934), the senses “...cannot be opposed to action, for motor apparatus and ‘will’ itself are means by which this participation is carried on and directed” (p. 22). Nor can they “...be opposed to ‘intellect,’ for mind is the means by which participation is rendered fruitful through sense” (p. 22); and they cannot be opposed to emotion either, for “[t]here is . . . no such thing in perception as seeing or hearing *plus* emotion” (p. 53).

If we consider, for instance, what it means to taste something—to really taste it—we see that it involves a great deal more than taste buds firing signals to the brain. The tongue is obviously involved in taste, as is smell, but consider also the importance of texture, temperature and therefore tactile senses. Or consider movement: the different actions of the mouth and tongue when sucking a candy, eating stew, biting into a pear, licking an ice cream cone. Consider how we sometimes eat with our hands, sometimes with chop sticks, how we cradle and swirl a snifter of brandy, and how these patterns of motor activity enter into the overall experience. Consider coffee and the deflation and inflation of our lungs and diaphragm as we blow cooling breath or inhale its aroma. Think about the sights and sounds of food: the vibrant red of ripe bell peppers, the aesthetics of sushi, the slurping of soup or crunching of apples versus crunching of popcorn. Food makes mouths water, skin flush, noses run; sometimes it makes us gag and sets our stomach pumping; potato skins sometimes produce a tingling around the jaw muscles. Plain, boring fare is delicious to bellies pinched with hunger, while a favourite dish sickens one already full. Food can evoke thoughts, memories and emotions, and thoughts, memories and emotions can shape our taste for particular foods. Dewey posited that without “...interaction between the *total* organism and objects, [objects] are not perceived” (1934, p. 54; emphasis added), and, indeed, we experience food through the mobilization of our entire body.

Very clearly a rich array of capacities enter taste experience. However, their power to sense does not simply point outward. One capacity speaks to another, changing its “perspective” on things, as when an empty stomach makes taste buds delight in plain

fare. That capacities mobilize one another lends credence to Cézanne's earlier cited declaration that a picture contains within itself even the smell of a landscape. It also gives credence to the more general claim, as Dewey (1934) put it, that "[n]othing is perceived" unless various capacities "work in relation with one another" (p. 175). So long as an object stimulates only one sense organ, say, the eye, then "experience is thin and poor" (p. 256); we do not really perceive the object, much less perceive it aesthetically. However, "[w]hen the tendency to turn the eyes and head is absorbed into a multitude of other impulses and it and they become members *of a single act*," then "perception"—as opposed to "some specialized reaction"—"occurs" (p. 256; emphasis added).

While perception involves intercommunication between a range of modalities, so that there is, for example, a sense in which we can *see* voices in moving lips, perception does not follow out of just any random intercourse. If the eye indiscriminately makes the ear hear voices, we are not perceiving, but hallucinating. Remember that Dewey did not merely claim that perceptual modalities must communicate, but that they must "work in relation to one another." Perception occurs when different modalities coordinate with one another, and they do so not merely of their own accord. In the same way that the hand's movements coordinate around things it encounters, perceptual modalities, as Merleau-Ponty put it, "...intercommunicate by opening on to the structure of the thing" (1945, p. 229).

For Dewey (1934), the manipulation and working of artistic media exemplifies how this occurs:

As we manipulate, we touch and feel, as we look, we see; as we listen, we hear. The hand moves with etching needle or with brush. The eye attends . . . the consequence of what is done. Because of this intimate connection, subsequent doing is cumulative and not a matter of caprice nor yet of routine. In an emphatic artistic-esthetic experience, the relation is so close that it controls simultaneously both the doing and the perception (pp. 49-50).

Here the hands, eyes and other bodily organs are “instruments through which the entire live creature, moved and active throughout, operates” (p. 50). It is with something like this in mind that Merleau-Ponty (1945) proclaimed that “...the body is not a collection of adjacent organs, but a synergistic system, all the functions of which are exercised and linked together in the general action of being in the world...” (p. 234). Merleau-Ponty added that if perception is “a certain mode of movement or form of conduct” and “the synchronization of [the] body with it,” then “the problem of forms of synaesthetic experience begins to look like being solved” (p. 234).

In offering this answer to the question of how and in what forms synaesthesia occurs, Dewey and Merleau-Ponty also offered a rebuttal to the occasional tendency to equate the occurrence to an illusion, a kind of perceptual breakdown. Some news reporters, for example, citing research showing that chips seem extra crispy when people hear crackling, have intimated that perception is less than trustworthy. From the standpoint of Dewey and Merleau-Ponty, however, the conclusion comes from a failure to recognize that a food is crispy not solely because it fragments easily, but also because it has a certain a look, sound and manner of mobilizing the jaw muscles and tongue—an overall way of synchronizing our sensitivities and actions. For this reason, both thinkers dismissed the notion that synaesthesia typically results from a kind of perceptual

breakdown. Both maintained, on the contrary, that nothing is really perceived except when different sensitivities and capacities work together and coordinate into a single joint action. They maintained, moreover, that this occurs insofar as actions are organized and synchronized around things encountered in the world.

Temporality and Reconstruction

“The living being is characterized by having a past and present,” and Dewey (1934) asserted “...that it is precisely when we get from an art product the feeling of dealing with a *career*, a history, perceived at a particular point of its development, that we have the impression of life” (p. 176). Dewey allowed that some “recognitions” are, of course,

...virtually instantaneous. But these occur only when, through a sequence of past experiences, the self becomes expert in certain directions, be it simply in seeing at a glance that a certain object is a table or that a painting is by a particular artist, say Manet. Because the present perception utilizes an organization of energies worked out serially in the past [e.g., habits] is no reason for eliminating the temporal quality from perception. And in any case, if the perception is esthetic, an instantaneous identification is only its beginning. There is no inherent esthetic value in identifying a picture as such and such. [However, t]he identification may arouse attention and lead to dwelling upon the painting in such a way that parts and relations are called out to compose a whole (p. 176).

Thereby it may lead the perceiver to have *an* experience.

That aesthetic and generic experience are both temporal phenomena should, Dewey granted, go without saying. Yet common ways of speaking obscure just this point, so Dewey’s emphasis was warranted. People have often distinguished, for example, between painting and cinema by calling the former a non-temporal art and the

latter a temporal one, when, as the filmmaker and theorist Sergei Eisenstein (1939) observed, there is an emphatic sense in which painting is cinematic, by which he meant dramatic and therefore temporal. To reinforce this claim, he referenced a passage from Leonardo Da Vinci's notes that outlined plans for a painting.¹⁹ The description, wrote Eisenstein, "...is executed in accordance with features that are . . . characteristic of the 'temporal' . . . arts" (p. 32). It resembles "a shooting-script," which is to say, it "...follows a quite definite *movement*. Moreover *the course of this movement* is not in the least fortuitous" or haphazard (p. 32). On the contrary, it is dramatic; it builds. "Beginning with a description of the heavens, the picture ends with a similar description, but considerably increased in intensity" (p. 32; cf. Levinson & Alpers, pp. 441-449).

Dewey (1934) offered a very similar, albeit more detailed, illustration of how we experience paintings. Suppose, he wrote, that a painting depicts "objects in which masses point upward" and that this initially catches our eyes. "[T]he first impression" will then be "that of movement from below to above" (p. 174). Suppose the painting also has horizontal lines and rhythms. These draw our eyes "across the picture," even while "the intensity remains in patterns that rise" (p. 174). Suppose further that a heavy mass dominates one of the lower corners, and "that instead of fitting into the vertical patterns," this mass "transfers attention to . . . horizontally disposed" features in the composition (p.

¹⁹ The passage in question describes the Deluge, the biblical flood narrated in Genesis 6-8. Citing the editor of his edition of Leonardo's *Trattato della pittura* (*A Treatise on Painting*), Eisenstein (1939) claimed that the description was "an unrealized plan for a picture" (p. 32). Leonardo, of course, did complete a series of sketches depicting the Deluge. Whether these sketches and the description Eisenstein cited were composed in preparation for a painting is, as I understand it, an open question. However, the general legitimacy of Eisenstein's remarks about visual arts such as drawing and painting does not depend on the ultimate answer to this question.

174). When our eyes meet it, “there is a halt, an arrest, a punctuating pause” (p. 174). However, this does not “operate as a disturbing interruption” or “break in experience,” but rather “as a re-direction of interest and attention” and therewith an “expanding [of] the significance of the object” (p. 174). At some point, this phase of perception completes itself. We return to the upward pointing masses that initially caught our eyes. A new cycle of perception begins, but with this difference: our eyes have, so to speak, been educated by their first tour around the painting, so that they are now sensitive to features of the composition that they formerly missed.

A number of lessons may be drawn from this illustration. Chief among these is that perception is temporal. Again, Dewey (1934) was somewhat apologetic for emphasizing such a commonplace, writing that

[w]hat has been said may seem to exaggerate the temporal aspect of perception. I have, without doubt, stretched out elements that are usually more or less telescoped. But in no case can there be *perception of an object* except in the process of developing in time (p. 175).

There can, he added, be “mere excitations.” Yet mere excitations are not perception. A view of the world that consists “of a succession of momentary glimpses” is no “view of the *world* nor anything in it” (p. 175), he remarked. Were the roar of Niagara Falls “...limited to an instantaneous . . . peep, there would not be perceived the sound . . . of any *object*, much less of the particular object called Niagara Falls. It would not be grasped even as a noise” (p. 175).

One reason that Dewey stressed the temporality of experience is that temporality is a pre-condition of intercommunication between perceptual modalities.

Intercommunication, in turn, is a pre-condition of having perceptual experiences that are not, as Dewey (1934) put it, “thin and poor” (p. 256). For this reason, temporality is also a precondition of aesthetic experience. Here there are number of claims to consider. First, there is the claim that the absence of intercommunication impoverishes perception. Research shows, for instance, that the ear struggles to perceive a waterfall as a waterfall if it is unaided by other perceptual modalities: a waterfall that sounds pleasant in the context of a park becomes irritating when recorded and played out of context, typically being mistaken for “...a subway train, trucks on a freeway, or something just as bad” (Whyte 1979, p. 48). Second, there is the claim that intercommunication between perceptual modalities requires time. Of course, this is an empty tautology if taken literally, for time is an *a priori* condition of human experience. What Dewey meant to say, however, is that perceptual intercommunication requires time to develop in much the same way that the unfolding of a dramatic narrative does.²⁰ It requires time because it entails more than internal nerve firings and sensory excitations. It occurs when different modalities synchronize with one another and “become members of a single act” (256), as

²⁰ There are, to be sure, clear exceptions to this rule. A *Nature* article titled *Hearing lips and seeing voices*, for example, reports that dubbing the sound /ba/ onto lip movements for /ga/ results in most people hearing /da/, and this phenomenon—known as the “McGurk effect”—is practically instantaneous (see McGurk & MacDonald, 1976). Here, however, it is well to note that this effect occurs under highly contrived and therefore exceptional circumstances. As an aside, it is also worth noting that this experiment does not demonstrate that intersensory communication entails perceptual breakdown. Consider the following points. First, whereas we normally encounter things and events that synchronize our capacities and sensitivities, this experiment delivers conflicting stimuli—stimuli designed to pull our sensitivities and capacities out of synchrony. What we encounter, therefore, is a situation or world that is already confused and broken down, which is to say, the McGurk effect is not a consequence of something being wrong with us, but something being wrong with the situation in which we find ourselves. Second, if we start with the assumption that we can see voices and hear lips—that is, if we start with the assumption that perception is in the first place synaesthetic—then we cannot even conclude that we misperceive the sound, for on this assumption, the isolated ear is not the arbiter of what we ought to hear.

when our sensitivities, movements and other capacities coordinate around a food we are consuming; and this kind of subject-object interaction is one that emphatically occurs over time.

Another very important reason for stressing the temporality of experience is that Dewey understood aesthetic experience as a historical phenomenon, by which he did not merely mean temporal, but also reconstructive. Historians use the term reconstruction to connote the activity of putting the past together. In interpreting a past event, however, historians always have knowledge of what followed it; they also have access to conceptual resources—theories and suchlike—that did not exist at the time of the event. This knowledge inevitably qualifies what the past event is understood to mean. Dewey made a similar point about means and ends, arguing that while means are temporally prior to ends, ends are often analytically prior to means (1896, pp. 66-70; also see 1925, p. 379; 1934, pp. 37-38). That is to say, means and therewith meanings are often only grasped from the standpoint of ends finally reached. In the case of aesthetic experience, culminations and fulfillments are end-standpoints from which we reinterpret elements within works of art. When our eye falls upon a focal point in a painting, we finally see how various other elements within the work function to (i.e., are means that) accentuate and direct attention to the focal point. When we reach the climax of a play, earlier portions of it acquire new significance and meaning (1920 pp. 2-3). In these and other ways, we reconstruct works of art from the standpoint of where they finally lead. We thereby come to encounter individual elements within works as forwardings (i.e., means) that jointly contribute to an overall culmination, which is part of the reason why Dewey

claimed that aesthetic experience builds into a unified and *meaningful* whole (see 1934, p. 171).

There is an additional sense in which Dewey characterized aesthetic encounters as reconstructive. To begin with, he noted that we enter each encounter with a range of habits, capacities and so forth. These enable us to interact with and therewith perceive things in certain ways. Thus there is a sense in which we thrust our own perspectives onto artistic objects. However, in much the same way a beer bottle resists the pressure of fingers wrapping around it, artistic objects resist certain perspectives and interpretations. That is to say, they do not allow us to engage with and perceive them in any way whatever. One might almost say that they, like us, have their own perspective, and in resisting the perspectives that we thrust upon them, they thrust their own perspectives back on us. This is particularly so when we have an aesthetic experience. After all, aesthetic experience *of* an artistic object requires a degree of sensitivity to the object; and if we force unyielding perspectives upon it, if we fail to adjust, accommodate and to some extent give into it, then we are not really sensitive to it. At the same time, however, we cannot be sensitive to the object at all if we do not come to it already equipped with a range of capacities.

Dewey reasoned, therefore, that aesthetic experience of a work of art entails mutual reconstruction of subject and object. On the one hand, subjects come to an artistic object—or what might loosely be called an artistic structure—armed with certain capacities, which might also be called structures. By engaging with the artistic structure through these capacities, subjects play a role in constituting and constructing it in

experience, which here means restructuring what the work initially offers. On the other hand, the work avails to subjects certain possibilities of interaction. To interact within this range of possibilities, subjects accommodate and adjust their own capacities or structures. Insofar as the work mobilizes capacities in heretofore unexperienced ways, subjects experience a restructuring or what Jackson has (1998) described as “a transformation of self” (p. 5). They gain “...a broadened perspective, a shift in attitude, an increase in knowledge, or any other host of enduring alterations...” (p. 5). Or as Dewey (1934) explained, works that are “not of the very ‘easy’ sort” challenge us with “dislocations and dissociations of what is normally connected” (p. 173). This interrupts our habitual ways of engaging with things, and since we are often insensitive to that to which we are already habituated, this interruption “...brings to definite perception values that are concealed in ordinary experience because of habituation” (p. 173). Such encounters thereby expand our capacity to perceive and experience.

-Seven-

Art, Meaning and Appearance

The concept of meaning is diffuse in Dewey's work. It is so in the sense that it diffused through, which is to say, permeated his accounts of perception, experience, art and knowledge, along with his understanding of what pragmatic philosophy is. It is also so in the sense that he never settled on a concise definition of meaning. This is not, however, because he lacked philosophical clarity, though his writing was admittedly imprecise at times. Rather, it is because he held that a rich variety of phenomena are inherently meaningful.

Dewey followed James by relating the essence of a thing—which here meant its meaning and appearance—to its value and use in human activities. However, where James particularly stressed the role of personal interests in determining use and value, Dewey particularly emphasized cultural practice, albeit without denying the importance of personal interests. The things we experience, he wrote, come "...clothed with meanings which originate in custom and tradition." We see others "...treat things in certain ways, subject them to certain uses. . . . The things are thereby invested for [us] with certain properties..." (c. 1951, p. 383).

Dewey's account of meaning also anticipated linguistic and analytic schools of philosophy that took hold near the end of his life. It did, first, by relating the meanings of words to their uses (see 1925, p. 186); second, by arguing that meaning is public; and, third, by rejecting the essentialist theory "...that general ideas or meanings arise by the

comparison of a number of particulars, *eventuating in the recognition of something common to them all*" (1925, p. 188; emphasis added). At the same time, however, Dewey deviated from many linguistic and analytic philosophers by denying that meaning is a primarily linguistic phenomenon; and by opposing the nominalist position that "meaning and essence are adventitious and arbitrary" (1925, p. 184), insisting instead that they conform to real structures in the world, albeit ones people help create. He also broke with many of the aforementioned thinkers by emphasizing the historical character of meaning. In this regard, his approach was similar to that of Collingwood, who argued that we acquire a rich appreciation of the meaning(s) of a concept, first, by acknowledging that it is a kind of artifact that has been constructed by humans; and, second, by contemplating how, at various stages of its development, the concept was used to deal with historically specific problems.²¹

Dewey's views on meaning perhaps come closest to those of existential phenomenologists, particularly Merleau-Ponty. Like Merleau-Ponty, Dewey contended that perception itself is inherently meaningful, and noted that this is reflected in everyday language where the word "sense" connotes both meaning and a mode of perception (1934, p. 22). Also like Merleau-Ponty, he held that meaning is historical. Yet here "historical" is used in a different sense than the one just described. It expresses the fact that people carry a lived history into each encounter in the world. While this lived

²¹ Here I borrow words from my 2007 "The Totalitarianism of Therapeutic Philosophy: Reading Wittgenstein Through Critical Theory" (p. 13), published in *Essays in Philosophy*. However, the words I borrow from the aforesaid article paraphrase remarks from Evan Cameron's 2004 "From Plato to Socrates: Wittgenstein's Journey on Collingwood's Map" (pp. 6-8), published in *AE: Canadian Aesthetics Journal*.

history can take the form of what everyday language calls “memory,” it more generally takes the form of what Dewey described as “deep-seated habits or organic ‘memories’” (1926, p. 121). Through our past dealings with things, we acquire certain habitual patterns of interacting; these affect how we handle things practically; and our practical handlings, as already discussed at length, shape what things mean to us and how they appear.

However, Dewey also suggested that established habits can exhaust and deplete meaning. This happens when phrases are overused. They become rather more like auditory burps than linguistically meaningful expressions. This also happens when we get caught in the numbing drudgery of sheer routine. In such cases, we are wont to say that one or another of our life activities is meaningless. In his working notes, Nietzsche quipped that “[w]e possess *art* lest we *perish of the truth*” (1967 [1888], §822)—“truth” here referring not to veracity, but to sedimented ways of living that form a basis for that which we unthinkingly accept as “true.” Along these lines, Dewey suggested that art is a countermeasure to entrenched habits and the decay of meaning that ensues from sheer routine. More specifically, he maintained that aesthetic experience of fine art re-educates embodied memories and ingrained habits. When we engage “intimately and intensely” with a work of art, he wrote, “...old habits are deployed in new ways, ways in which they are adapted to a more completely integrated world so that they themselves achieve a new integration. Hence the liberating, expansive power of art” (1926, p. 121).

Seen thus, aesthetic engagement with art has two complementary effects: the heightened level of integration intensifies meanings and therewith experiences, while the

redployment of habits expands our capacity to encounter things meaningfully, and sometimes even frees us to see the world in a new light. In what follows, I consider each of these effects in order. I consider, in particular, how Dewey's writings on art delivered a theory of meaning that augmented his accounts of perception, experience and knowledge, especially his account of scientific knowledge. I also consider how this theory of meaning counters the common view that classical pragmatists advance a kind of "subjective reason," which is to say, a method of thinking "...essentially concerned . . . with adequacy of procedures for purposes more or less taken for granted" and relatively indifferent "...to the question [of] whether the purposes as such are reasonable" (Horkheimer 1947, p. 3).

It is evident that Dewey's reflections on art helped him clarify his own philosophy, and he suggested that it might similarly aid others. In *Art as Experience* (1934), he counselled that art "...gives a clew to the nature of things that philosophical systems have rarely followed" (p. 288). "The interpenetration of the old and new, their complete blending in a work of art, is [a] challenge issued by art to philosophical thought" (p. 288). I conclude this chapter by taking up this challenge. I consider ancient ideas found in Plato's work, which, as Dewey remarked in 1930, "still provides my favourite philosophic reading" (p. 21). I return, more specifically, to the discussion of the Platonic concept of *eidos* that was initiated in Chapter Four. I do so because the concept reminds us of old questions that philosophers have repeatedly tried to answer in an effort to account for how it is that things come to appear intelligibly to us, and Dewey's philosophy of art and the theory of meaning it conveys supplies new ways of approaching

these questions. The concept of *eidos*, therefore, helps us recognize part of what Dewey's philosophy of art achieved; his philosophy of art, in turn, helps us appreciate the concept of *eidos*, which is worth appreciating if only because of its historical importance; and the two together help us to better understand how things come to appear intelligibly to us.

Dewey, it will be recalled, maintained that the notion of "inner experience" and therewith the notion of "mental representation" were peripheral to ancient Greek accounts of experience. In line with this, Plato's concept of *eidos* undergirded a theory of knowledge that did not treat knowledge as a mode of mental representation. By establishing a dialogue between Dewey and Plato, I aim to expand Dewey's account of how we can access things intelligibly without representing them; and by doing so, I hope to explicate additional ways in which classical pragmatists challenged subjectivistic strains in modern thought.

Intensified Meanings

In *Art as Experience* (1934), Dewey differentiated between two kinds of means, namely, "mere means" and "media." The former, he explained,

...are usually of such a sort that others can be substituted for them; the particular ones employed are determined by some extraneous consideration, like cheapness. But the moment we say "media," we refer to means that are incorporated in the outcome. Even bricks and mortar become part of the house they are employed in to build; they are not mere means to its erection. Colors *are* the painting; tones are the music. A picture painted with water colors has a quality different from that painted with oil. Esthetic effects belong intrinsically to their medium (p. 197).

The notion that genuine means or media are “taken up into the consequences produced and [remain] immanent in them” (p. 197) was crucial not only to Dewey’s philosophy of art, but also his pragmatic philosophy.

The name “pragmatism” or “instrumentalism,” as Dewey preferred to call it, and pragmatic methodologies that articulate meanings in terms of “means,” “uses,” “ends” and “consequences” have fuelled a mistaken impression that pragmatists esteem expedience above all else. Yet Dewey, especially in his later writings on art, emphatically insisted it is an error to judge meaning, indeed, to judge even usefulness on the basis of mere expedience. By doing so, wrote Dewey (1925), “...we arbitrarily cut short our consideration of consequences” (p. 362), so that we mistake detrimental activities for useful ones:

Thus it is often said that a laborer’s toil is the means of his livelihood, although except in the most tenuous and arbitrary way it bears no relationship to his real living. Even his wage is hardly an end or consequence of his labor. He might—and frequently does—equally well or ill—perform any one of a hundred other tasks as a condition of receiving payment (p. 366).

Dewey’s account of art—and all these quotations are from a chapter on art—qualified what he meant by terms such as “use” “means,” and “consequence.” Therewith it qualified his entire instrumental philosophy. When he spoke of things being related instrumentally and therefore meaningfully, he asserted that they are in a relationship wherein “...consequences belong *integrally* to the conditions which may produce them” (p. 371). This was not merely an ideal of how things ought to be. It was—and still is—an assertion that captures certain everyday notions of what meaning is, for to say

something is accidentally or arbitrarily related to something else is in a variety of senses to call the relationship meaningless.

Note, however, that when Dewey claimed that instrumental and therefore meaningful relations entail integral or inherent relationships between means and ends, he did not assert that the relationships are coerced or necessary. Consider, for example, brushstrokes (means) in a painting and a focal point (an end) towards which they lead. The two are integrally related, yet not because the artist is forced to compose the work in one specific way, but rather because neither has independent existence. The end is where the means lead, so much so, that an unpainted portion of the canvas will be a focal point if that is where brushstrokes lead the eye. Means, in turn, only become means when viewed from the standpoint of where they finally lead, for it is only when our eye falls upon the focal point that we finally see how the brushstrokes function to (are means that) accentuate and direct attention to the focal point (an end).

The claim that means and ends belong inherently to one another suggests—to employ an overused formula—that a meaningful whole is not reducible to the sum of its parts. This is because the parts are what they are by virtue of how they *jointly build into a culminating movement*: a whole. Two adjacent dabs of paint in a van Gogh composition appear differently than either alone. Orange against a background of blue becomes more vibrant; and the many dabs together form a composition that is not reducible to the sum of individual brush strokes. Not only does the overall composition modify the appearance of elements within it; it also defines them functionally. When one analyzes a composition into various elements of design and describes their aesthetic function, one does so on the

basis of already being acquainted with the overall aesthetic outcome. A focal point is not a focal point in itself, but in the context of a whole composition, which suggests, once again, that the aesthetic outcome is analytically prior to means that lead to it. One can only analyze and ascribe aesthetic functions to elements of design insofar as one has already placed the elements within a composition, even if only imaginatively.

While the whole makes the parts what they are, the process also works the other way around. “The kinds of means used,” wrote Dewey, “determines the kinds of consequences actually reached” (1935, p. 259). It happens that this remark was made in reference to political actions, yet the claim holds elsewhere, and it introduces an important amendment to the current discussion. Media, elements of design and other things potentially designated as means are so integral to artistic outcomes as to be inseparable from them. The climactic outcome of a novel is not an isolated element at the terminus of a story, but a culminating end to which the events in the story lead. Sever one from the other, and both cease to be what they are. So when Dewey said that means and ends belong inherently or integrally to one another, he asserted the following: while they are conceptually distinguishable, they are existentially inseparable; they name phases of a single movement. In his own words, “[m]eans and ends are two names for the same reality.” They “...denote not a division in reality but a distinction in judgment. . . . ‘End’ is a name for a series of acts taken collectively—like the term army. ‘Means’ is a name for a series of acts taken distributively—like this soldier, that officer” (1922, p. 36).

The point, then, is that art—contrary to what some of the preceding paragraphs intimate—erodes fixed orders of priority, along with hard divisions between means and

ends, parts and wholes, form and content. It may be, for example, that van Gogh arranged the stars and Moon in his *Starry Night* (1889) as a means of composing an overall form or design. Yet it may also be that he crafted the composition as a means of making the stars and Moon swim in vibrating eddies and so radiantly burst from the canvas. Doubtless he intended both, and in any event, both outcomes are realized. Dewey (1934) maintained that "...what is form in one connection is matter in another and vice-versa" (p. 128). He stated more generally that things "do not stand out by themselves" (p. 117). A painting does not have colour, then in addition to colour, design; rather, colour expresses design, and design colour. "In . . . degree to which color is really *Painted*," said Dewey quoting Cézanne, "design exists. The more the colors harmonize with one another, the more defined is design. When color is at its richest, the form is most complete" (p. 121).

That colour and design appear not merely with but *through* one another points to the basic fact that no quality is ever perceived alone—a fact reflected in the realm of language where properties are ascribed to nouns by means of adjectives. The word "adjective" is itself both a noun and an adjective. As a noun, it refers to words or phrases naming attributes. As an adjective, it means "additional; not standing by itself; dependent" (Barber 1998, p. 15), and quite appropriately, for there is no property (or adjective) that cannot be qualified by yet another. Heat and cold, for example, are never purely thermal. Warmth from a fireplace is a crackling, flickering, spicy, soothing, gentle orange-yellow warmth that invites us to turn our heads towards it; and the coldness of packing snow is a mouldable, trickling cold that coats the hand and drips through fingers.

Some will perhaps object that these examples synthesize into compound forms what are rightly basic qualities; and that they consequently take what is initially there and use language to contrive what is never directly experienced. Dewey insisted the reverse is actually so. To speak of a pure and unadulterated warmth or cold is to describe what is perhaps endured in cases of pathology, but never actually perceived in things and events encountered in the world (see Dewey, 1934, p. 126).²² To feel a pure, isolated heat in one's hand—a heat therefore unconnected to anything the hand is doing or touching—is to suffer illness, for instance, nerve damage. Isolated sensory excitations are not perception.

In the above example of perceptual breakdown, the connections between the hand's doings and the consequences it undergoes as a result of them are literally disintegrated. For Dewey, this makes perceptual breakdown equivalent to a breakdown of meaning. In his technical vocabulary, this is because the breakdown destroys connections of "means-consequence" (i.e., of doing and undergoing), and therewith severs meaningful relationships. In everyday language, it is because regions of the world encountered through the hand lose coherence, fall apart, cease to make sense. Aesthetic experience stands in sharp contrast to this sort of occurrence. In everyday terminology, it involves a heightening and concentrating of perception, and in Dewey's terminology, it involves an intensified integration of means and ends. This was one of Dewey's reasons for maintaining that fine art functions to intensify meanings.

²² Put another way, it is to use what Chapter Five, under the influence of Merleau-Ponty, called a "second order expression."

Expanded Meanings

In discussing fine art, coherence has been emphasized, and justifiably so, for even splashes of paint in a Jackson Pollock piece settle into a highly integrated composition. However, while artistic works resolve materials into settled and well-balanced forms, they also include twists that unsettle and throw audiences off balance. Quoting Francis Bacon, Dewey (1934) wrote: “[t]here is no excellent beauty that hath not some strangeness in proportion” (p. 139). “The unexpected turn,” Dewey went on to explain, which even artists do not always foresee, “...saves [a work] from being mechanical.” It adds interest and intrigue. It “...is a condition of the felicitous quality of a work of art” (p. 139), and also of having an aesthetic experience.

One of the ways that art unsettles and throws us off balance is by subverting convention. In everyday life, the word “subversive” often carries unfavourable connotations. By contrast, the world of fine arts has, since the Romantic era, tended to disparage “reactionary” artists for their failure to subvert established traditions. This points to the emphatically reconstructive character of artistic activity, for one can only be subversive insofar as there is something already available to mess about with and rework. Early jazz artists, who were considered subversive in any number of senses, used musical instruments already available; often they reworked existing compositions into jazzy arrangements; and they followed the centuries old practice of employing the equally tempered scale, which largely supplanted the Pythagorean scale during the Baroque era. So while they subverted tradition, they did not do so by obliterating it, but rather by

building upon it, which perhaps explains why Nietzsche remarked that “[c]onvention is the condition of great art, *not* an obstacle” (1967 [1888], §809). They took what was already available, and out of it constructed—or more accurately, reconstructed—new means of expression.

“Reconstruction”—a term particularly favoured by Dewey—expresses a circumstance wherein things are not formed from scratch, but re-formed from what is already at hand. The term stands as a reminder that we are always in a medial position, in the middle of things, already engaged in a world—a world, wrote Dewey (1934), “...that is human as well as physical, that includes the materials of tradition and institutions as well as local surroundings” (p. 246). It is a reminder that experience arises from interacting with one’s environment, and by extension rearranging some portion of it:

A man does something; he lifts, let us say, a stone. In consequence he undergoes, suffers, something: the weight, strain, texture of the surface of the thing lifted. The properties thus undergone determine further doing. The stone is too heavy or too angular, not solid enough; or else the properties undergone show it is fit for the use for which it is intended. The process continues until mutual adaptation of the self and the object emerges and that particular experience comes to a close (p. 44).

Mutual adaptation means mutual change; and since the change occurs in entities that pre-exist the specific interaction, mutual change here entails mutual reconstruction.

Dewey claimed that what is so in this particular instance “...is true, as to form, of every experience. The creature operating may be a thinker in his study and the environment with which he interacts may consist of [a certain setting of] ideas...” (1934, p. 44). This last sentence indicated that thinking, like art and experience in general, is also reconstructive, a point Dewey explicitly made when he wrote that “...thinking is no

different in kind from the use of natural [i.e., available] materials and energies, say fire and tools, to refine, re-order, and shape other natural materials, say ore” (1925, p. 67); or when he claimed that “[w]e cannot lay hold of the new,” nor “...even keep it before our minds, much less understand it, save by the use of ideas and knowledge we already possess” (1929a, pp. viii-ix). Thus, as Nelson Goodman, would later argue:

Learning how to think . . . is learning how to *construct* rather than criticize [or negate]; and since we can only construct something from elements already at hand, and hence already arranged into a world, it is to learn how to *reconstruct* a better world from a world we encounter... The arts, therefore, are the models for science and philosophy, rather than the reverse, for they encompass the reconstructions of the world we most freely undertake (Cameron 1995, p. 97).

Never is dismantlement complete. No slates are wiped clean. Instead, there are *reformations*, for example, social reformations that re-form, turn, revolve, which is to say, reconstruct existing arrangements, institutions and principles into hopefully better ones. Intellectual revolutions follow the same course. Einstein developed a new concept of “space-time,” yet does so only insofar as he can speak about “space” and “time” in the first place (see Einstein, 1952, pp. 161-162; also see Merleau-Ponty, 1945, p. 432). He conceived the new by adapting, adjusting, twisting, mediating and re-working the old. Indeed, the word “conceives” suggests this very point: the new—a baby, for instance—is *conceived*, created, yet only with contributions from the old, in this case, the parents.

The idea that learning to think means learning to reconstruct rather than criticize or negate might well puzzle those familiar with Dewey’s many works of social criticism and his history of activism, which, in fact, earned him a dossier at the FBI (see Martin 2002, pp. 351 & 458-459). Another way of expressing the idea, however, is to say that

effective criticism is never *mere* negation, but rather negation that occurs through reconstruction. The notion can be illustrated by drawing from the work of Herbert Marcuse, who was admittedly ambivalent towards pragmatists, yet nevertheless shared common ground with Dewey, including Dewey's background in Hegelian philosophy, which he said "left a permanent deposit in my thinking" (1930, p. 21).

Marcuse observed that philosophy has historically been an activity that works to transcend established discourses. A standard challenge to his view is that, like it or not, we depend on pre-existing discourses. If we construct our own private language, nobody will understand us, nor will we understand ourselves. Marcuse (1960) accepted this. He agreed that established languages "...are still those of the game (there are no others), but the concepts codified in the language of the games are redefined..." (p. 449). The philosopher moves outside and therewith negates established discourses not by manufacturing language from scratch, but by re-ordering what is already there. Here the crucial and loosely Hegelian point is that the negation does not abolish what came before. In the words of Marcuse, "it reveals modes and contents of thought which transcend the codified pattern of use and validation." However, the critical philosopher "...does not invent these contents," but "assembles and reactivates them" (p. 449). Or as Dewey (1929b) said, "[p]hilosophy is . . . a generalized theory of criticism" (p. xvi), and "[t]he constant task of [philosophical] thought is to establish working connections between old and new subject-matters" (p. viii).²³

²³ In this paragraph, I once again borrow words from my 2007 "The Totalitarianism of Therapeutic Philosophy: Reading Wittgenstein Through Critical Theory" (p. 7), published in *Essays in Philosophy*.

For Marcuse, poetry offers a paradigm example of what he calls “critical” or “negative” thinking. Quoting the French poet Paul Valéry, he wrote “...thought is the labor which brings to life in us that which does not exist” (1960, p. 448; 1964, p. 68). Poets recombine words in unheard-of ways to express something inexpressible and in this sense non-existent in ordinary language. In doing so, they subvert and move beyond what is commonly accepted, affirmed and posited. This constitutes the negative, as in non-affirmative and non-positivistic, dimension of their art. It also accounts for why Marcuse hints that critical philosophers might be characterized as poet-philosophers, for they too recombine words in strange new ways in order to bring life to concepts inexpressible in established discourses.

On some pragmatic accounts, new concepts engender new ways of perceiving. As James (1911) remarked, “[c]oncepts not only guide us over the map of life, but we *revalue* life by their use.” Concepts “...arouse new feelings of sublimity, power, and admiration, new interests and motivations” (p. 1019). New interests and motivations direct what we attend to, and thus affect how the world appears. They also empower and ready us to engage in new courses of action. In this way too they affect how the world appears, for perception is a mode of acting in the world. The relation between concepts and perception, wrote James, “...is like that of sight to touch. Sight indeed helps us by

preparing us for contacts while they are yet far off, but it endows us in addition with a new world of optical spender...” (p. 1019).²⁴

Dewey wrote that “[t]he ‘magic’ of poetry . . . is precisely the revelation of meaning in the old effected by its presentation through the new. It radiates the light that never was on land and sea but that is henceforth an abiding illumination of objects” (1925, p. 360). By reconstructing old grammars into new forms, poetry expands the universe of meaning. For reasons just stated, it also augments our perceptual capacities. And what is so of poetry is so of fine art in general: it too expands both meaning and perception. Earlier, for example, it was noted that 19th century impressionist painters learned to experience and reveal the effects of light in new ways, and that their paintings challenge many viewers into a richer sense of what light is. To acquire a richer sense of something is to acquire an expanded sense of what it means, and to sense something in a richer way is to perceive it more vividly. One could indeed write volumes describing the ways in which art expands meaning and perception. Yet for those who have not had considerable experience either making art or engaging intimately and intensely with it, these volumes would likely be unconvincing; and for those who have, they would merely state the obvious.

²⁴ To avoid confusion, it is worth noting the above quoted passages come from a posthumously published book in which James expressed views that are not completely consistent with his earlier writings. In particular, the divide between “percept” and “concept” was less severe in this work than in earlier ones such as *The Principles of Psychology*.

Eidos Revisited

Earlier it was noted that “instrumental” relationships are, by Dewey’s definition, meaningful relationships. They entail integral connections between means and ends, in the absence of which relationships cease to be meaningful. Hence we are wont to say that a relationship is meaningless when two things connect in a merely arbitrary way. It was also noted, however, that an integral and thus meaningful relationship is not a coerced relationship, and this too is reflected in everyday language, for if forced, say, into a job or a number of unwanted social relationships, we are wont to complain that our professional and personal lives lack meaning. Dewey captured both of these notions about meaning when he remarked that

[t]he doings and sufferings [i.e., undergoings] that form experience are, in degree to which experience is intelligent or charged with meanings, a union of the precarious, novel, irregular with the settled, assured and uniform—a union which also defines the artistic and esthetic (1925, p. 358).

This points to the fact, on the one hand, that experience becomes pallid and thin when there is little or no free play. If actions are forced; if they are unvarying and mechanical, things lose significance and withdraw from notice, sometimes even from perception.²⁵ On the other hand, if there is no structure; if things are wholly unsettled and unfamiliar; if things float completely free, then experience dis-integrates and scatters. This is to say, once again, that experience in the “vital sense”—experience charged with meaning—arises only when structural constraints impose some limits on free play, so that our

²⁵ Perception researchers supply an extreme example of this. When they place people in conditions that neutralize the effects of ongoing micro-saccadic movements of the eye, thereby creating an unchanging retinal image, visually perceived objects fade or completely disappear (see Pritchard 1961).

doings and undergoings are not “all over the place,” but aligned, synchronized and integrated into connections of “means-consequence.”

For Dewey (1925), the conditions under which we have experience in the vital sense were also conditions under which “we become capable of perceiving things instead of merely feeling and having them” (p. 182). The distinction between the former and the latter might be compared to the difference between seeing a candle flame as a candle flame and merely being aware of a fluttering smear of light. In the first instance, we do not merely register the *qualia* of the thing; we discern what the thing is; and in traditional philosophical parlance, discerning the “what is” or “being” of a thing means discerning its “essence.” Dewey, of course, did not speak about “what things are” in an absolute sense, but rather spoke about what they are or what they mean in particular world contexts. Thus he rejected the essentialist view that a thing—a candle, say—can only appear as a candle insofar as there is an immutable and universal form or *eidos* that characterizes the being and therewith the appearance of all candles in all times and places.

It will be recalled from Chapter Four that *eidos* is a Greek word that “...basically means ‘something that is seen’” (Novak 2004, p. 1). It is also a word that Plato poetically and quite brilliantly used to signify that which allows the “being” or “what is” of a thing to *appear* to the knowing mind. Brilliantly, however, does not mean unproblematically, especially from Dewey’s standpoint; and yet, while Plato’s concept of *eidos* entails a theory of knowledge Dewey criticized, he was not entirely unsympathetic to the classical Greek outlook. First, he retained the classical opposition to nominalism, only where

Platonic thinkers would have argued, for example, that a hammer appears as a hammer because it participates in an immutable and universal form or *eidos*, Dewey would have said that it appears as a hammer, as opposed to mere stick-like thing, because of its role or place in our lived activities or what Wittgenstein called “forms of life.” The commonality between the two positions is that both reject the notion that forms are mental constructions that we project onto the world, which is to say, both maintain that forms exist “out there” beyond individual minds. Second, Dewey retained the notion that essence—which here refers to meaningful patterns and organization—is bound to the appearance of things, for if we inhabit a world, say, in which hammers are used, we do not first perceive stick-like things and only later decide that they fall within the class of entities called “hammers.” Instead, hammers immediately appear as hammers. Third, Dewey retained the classical view that things, as opposed to mere *qualia*, can only appear as perceptible forms if the following criteria are met: there must be structure, unity and endurance.

The previous four chapters have repeatedly illustrated this last point, albeit without always emphasizing it. They have done so by showing that experience and therewith intelligible appearance—which Plato’s concept of *eidos* equates to form—emerge when doings and undergoings are linked through the action of being in the world, so that they integrate in much the same way that incidents in a story cohere into a *single*, narrative *structure* that *endures* over time. The current chapter offers additional insight. As discussed, Dewey suggested that things come to have certain meanings and thus come to appear in certain ways by virtue of their placement within our worlds—worlds here

referring to teleological frameworks in which ends, means and therefore meanings show up. His philosophy of art reiterated a similar point. It stressed that means and ends, media and artistic outcomes, doings and undergoings belong inherently to one another. Each is what it is by virtue of relating integrally to the other; and by virtue of these integral, mutually defining relationships, constituents within an artistic composition or some other thing we experience aesthetically do not appear as isolated, fleeting bits and pieces, “here now, gone an instant later.” They fuse, become one within a temporally extended and integrated movement or narrative structure. Hence to experience things aesthetically is to experience them in ways that satisfy the criteria mentioned in the previous paragraph.

However, while aesthetic experience exemplifies experience that satisfies the aforesaid criteria, anything that can properly be called experience will to some extent satisfy them. After all, if we register nothing more than a fleeting rush of individual *qualia*, we do not really experience or perceive anything at all. Fortunately this rarely happens because we inhabit worlds, and worlds have objects and schemes around which our sensitivities and capacities cohere. Dewey (1934) noted, for example, that we perceive that “...properties . . . exist because ‘sensations’ are of *objects* ordered in a common world and are not mere transient excitations” (p. 126) “The connection of qualities with objects is intrinsic in all experience having significance. Eliminate this connection and nothing remains but a senseless and unidentifiable succession of transitory thrills” (p. 126).

Having stressed that Dewey shares the Platonic view that structure, unity and endurance are pre-conditions of things appearing to us, it should also be reiterated that he

decisively broke with Platonic thinking in a number of ways. He did not locate form or structure in individual things as much as he did in the worldly schemes in which we encounter them. Along similar lines, he did not equate unity to universal essences that bind the many into one, nor did he equate endurance to immutability, but instead regarded unity and endurance as outcomes realized when things integrate within a *movement*—for example, a form of life activity—that holds together and in this sense endures over time. More strikingly, Dewey held that elements of change, irregularity and instability are, along with the other criteria just mentioned, pre-conditions of things appearing to us. Or perhaps this is not quite right, for change, irregularity and instability do not work alongside the other criteria, but rather contribute to their fulfilment. They do, according to Dewey, because integral connections between means and ends do not form if everything is forced, mechanical and unchanging; and absent these integral connections, incidents do not integrate in the manner described above. Consequently things do not appear in meaningful relationships. They lose significance and withdraw from notice. In these ways Dewey shifted away from the traditional western philosophical view that the intelligible and therewith the knowable are, by definition, beyond change. Philosophers have defended this view on the grounds, for example, that knowledge is awareness of “what is,” and we cannot point to this or that and say that it “is” if it is dissolving, passing away and changing into something else. On the same grounds, philosophers have traditionally argued that reality—or “that which is”—is likewise beyond change.

Many are inclined to conclude that our modern age of science has, like Dewey, dispensed with this view, and while this conclusion is not entirely unjustified, it is somewhat misplaced. After all, Galileo, who we celebrate for inaugurating the modern age of science, advanced kinematic laws that are meant to hold across time and place—laws, therefore, that are immutable and universal. Furthermore, while his laws were partly derived from careful observation, for example, of marbles rolling on inclined planes, they do not describe motions of marbles that could ever be perceived through the senses. What they describe, rather, is how marbles would in theory move over a frictionless surface, which is to say, under ideal conditions never actually observed. So where Platonic thinkers equated reality to immutable and universal ideal forms, Galileo described physical reality in terms of immutable and universal patterns that are only realizable under ideal conditions. This is not to say Galileo was a thoroughgoing Platonist, but merely to make the case that the modern era has not entirely escaped the notion that reality is unchanging. Nor is it to suggest that Platonic forms are equivalent to physical laws. In point of fact, Dewey argued that a failure to appreciate just how different the two are has led many to mistakenly cling to the notion that reality is unchanging (see 1929b, pp. 205-206).

Without insinuating that ancient thinkers were mere “armchair speculators,”²⁶ it may, however, be said that the modern emphasis on experimental science has given rise to the view that we come to know reality by actively manipulating it. This view, in turn, entails a significant reordering of classical values. Dewey argued, in particular, that it entails an adjustment to the classical tendency to think *tekhne* a lesser form of knowledge than *episteme*. In the texts of Plato and Aristotle, *tekhne* encompasses everything from statecraft to the medical arts to the art of war, the art of calculating, the art of piloting a ship, playing a musical instrument, composing a painting, making shoes and managing money. It entails knowledge about certain kinds of objects, but these objects of knowledge are not objectives at which it ultimately aims (e.g. Aristotle, *Phys.* 193b10-20). Awls, leather and even shoes are objects of knowledge for the shoemaker, but the objective of the shoemaker’s *tekhne* is not to know what these things fundamentally are, but rather to know how to work available materials into shoes. The objective of *episteme*, by contrast, is to discover fundamental forms and principles upon which the being of things depends, along with the possibility of us knowing them. The objective, to put it another way, is to discover that which allows for the instantiation and recognition of the realities we encounter, and yet does not depend on these realities for its being. In the case of *episteme*, moreover, the objective or aim and the object of knowledge are one and

²⁶ While ancient thinkers did not engage systematic experimentation in the way that contemporary scientists do, many of them were careful observers of the natural world. By experimenting with weights and by further observing that a downward stream of water attenuates into separate droplets as it falls, Strato—who lead Aristotle’s Lyceum from 286 to 268 BC—discovered what Galileo later rediscovered, namely, that falling bodies accelerate. By observing eclipses and noting that a sphere is the only form that can always cast a circular shadow, ancients learned that the Earth is round. Through an experiment involving measurements of shadows cast by the Sun, Eratosthenes (c. 276-196 BC) calculated the approximate circumference of the Earth. There are many other such examples.

the same. When Plato investigated the ideal form, say, of justice, he did so with the objective of securing the ideal as an object of knowledge. Aristotle did similarly when he inquired into first principles and causes. For Plato and particularly Aristotle, that which is independent or free was better than that which is not; an end in itself was the highest good; and knowledge of fundamental realities was deemed the highest form of knowledge (e.g., Aristotle, *Met.* 982a5-b30). Consequently *episteme* was esteemed over *tekhne*.²⁷

According to Dewey, the rise of modern science has entailed “a generalized . . . adoption of the point of view of the useful arts” (1925, p. 133) and therewith a rethinking of classical Greek values. An initial point to remember is that “science”—from Latin *scientia* for “knowledge”—traditionally refers to any organized field of knowledge. Traditionally, moreover, it has designated fields of inquiry held in high esteem. Thus, for example, when Christianity became dominant, Christian theology became a science. Then, when systematic observation and experimental study of material nature became the preferred mode of inquiry, it was designated as science. So if, as Dewey claimed, modern science adopts the point of view of the useful arts, it follows that esteem for *tekhne* has grown. Dewey suggested, however, that we express our esteem more in deeds than words, for we often classify disciplines as “scientific” with the intention of

²⁷ A caveat: the relationship between *tekhne* and *episteme* is not necessarily antagonistic, nor is the distinction between the two always clear-cut. Plato, for instance, sometimes suggested that the former kind of knowledge can help us ascend to the latter. Sometimes he also suggested the reverse—for example, that acquiring knowledge about the ideal form of justice adds to our knowledge of statecraft. On some occasions, moreover, Plato seemed to identify a single field of understanding with both kinds of knowledge. Mathematics is a case in point: it can be pursued as an object of knowledge in its own right, yet also be pursued as a useful art.

distinguishing them from arts. Dewey obviously thought this distinction was overdrawn, and he offered a number of reasons for thinking so.

First, scientific observation is carried out with the aid of instruments or tools; tools are means by which we work upon things; and when workings are skilful and intelligent, directed towards an end and efficacious at producing some result, they fall within the scope of what we call “art.” Dewey explained that scientists study an object by doing something to it, by bringing “some energy to bear upon [it] to see how it reacts” (1920, p. 113) or by “deliberately alter[ing] the conditions under which we observe [it]” (1929b, p. 85). Scientists use instruments to introduce “...changes which will elicit some previously unperceived qualities” (1929b, p. 87), as when they reveal a microscopic structure by bombarding it with electrons or use a telescope to redirect light from a distant galaxy onto an imaging device. At the outset of this dissertation, *tekhne* was described as a kind of applied knowing that works things into appearance, and scientists, through application of art, manipulate materials under study and therewith bring heretofore unseen phenomena into appearance.

Second, a scientist does not typically build or learn a theory with the final objective of securing the theory as an object of knowledge. Rather, the scientist pursues the theory with the objective of securing a means through which observable phenomena can be rendered intelligible. Assuming, therefore, that it even makes sense to call the theory an “object of knowledge,” it is not one in the same way that a Platonic form is, for a form is both an object of knowledge and a final objective of an inquiry, though it may

incidentally be used to pursue other objectives. Put another way, knowledge of the Platonic form—assuming, for a moment, that the form exists—is knowledge of reality, whereas knowledge of the theory is possession of an instrument that works to make reality knowable or at least intelligible (see 1929b, pp. 205-206). So while it is perhaps going too far to equate the scientist’s knowledge of the theory, say, to the shoemaker’s knowledge of leather, the two do share an important commonality: both are used for working and making. The shoemaker’s knowledge is applied to the making of shoes; the theory is applied as a sense-making instrument; and neither is complete until it works upon and re-forms materials, thereby making them appear in new ways.

Kepler’s theoretical model of the solar system, to return to an example from Chapter Two, works into appearance an arrangement of neat, concentric planetary paths. It and other scientific theories, moreover, structure how scientists directly and indirectly work upon objects of investigation and thereby “shake loose” heretofore “unperceived qualities” (1929b, p. 87). In addition to and by virtue of structuring hands-on work, theories also structure how scientists make objects—both conceptual and physical—relate. Therewith they structure how given fields of inquiry knit together into coherent worldviews. Or to clarify, it is not that theories necessarily structure workings and makings in the sense of preceding and determining them. Sometimes theories may follow out of already established patterns of doing and handling, and the former are not, in any event, entirely separable from the latter. The point is that a scientific theory—however it may arise—performs work; it performs, more specifically, what Dewey (1934) called “the *work* of art” (p. 214). In the case of fine arts, this “...work takes place

when a human being cooperates with [an artistic object or] product so that the outcome is an experience that is enjoyed because of its liberating and ordered properties” (p. 214). And in the case of a scientific theory, the work takes place when actions, incidents and objects coordinate into instrumental, which is to say, integral and hence meaningful relationships, so that orderly arrangements cohere intelligibly into appearance.

Dewey, in fact, held that all knowledge is “instrumental,” by which he meant a work(ing) of art, and he often used examples from science to reinforce this claim. However, he did not thereby insinuate that science—here understood in the contemporary sense—is the only path to knowledge. Dewey (1925) emphasized this when he remarked that thinking, which is not always scientific, “...is pre-eminently an art; knowledge and propositions which are the products of thinking, are works of art, as much so as statuary and symphonies” (p. 378). This means that thinking entails building, and since we build with materials at hand, using, for example, already available ideas, thinking entails reconstruction. This also means that “[i]f defective materials are employed or if they are put together carelessly and awkwardly, the result is defective” (p. 379); it will then cast “a fog which obscures [things]” (p. 378). Yet if the reverse is so, then the working of thought integrates and illuminates. “Every successive stage of thinking [becomes] a conclusion in which the meaning of what has produced it is condensed; and it is no sooner stated than it is a light radiating to other things” (p. 378). This suggests that thinking is reconstructive not only in the sense just mentioned, but also in the historical sense discussed in Chapter Six. There it was seen that antecedents only appear as means when considered or re-viewed from the standpoint of culminations finally reached. It was

seen, in other words, that culminations bring ends and therewith means into appearance. Dewey's point about conclusions was similar. "While a conclusion follows from antecedents, it does not follow from 'premises' [...]. Premises are the analysis of a conclusion into its logically justifying grounds" (p. 379). That premises "emerge only as a conclusion becomes manifest" (1934, p. 38; also see 1925, p. 379) does not imply that the conclusion appears in the absence of premises. It means, rather, that we reach a conclusion when we acquire the capacity to see how antecedents interlock and build into an integrated whole, and so come to see antecedents as premises leading to a conclusion. This is why Dewey asserted that premises are analyzed out of the conclusion, as if to say the latter contains the former; and why, moreover, he stated that "condensed" within a conclusion is "the meaning of what has produced it" (1925, p. 378).

A founding principle of classical pragmatism—formulated in Peirce's landmark *How to Make Our Ideas Clear* (1878) and often repeated by James and Dewey—is that "the root of every real distinction of thought" is that it makes a practical difference, and "...there is no distinction of meaning so fine as to consist in anything but a possible difference of practice" (p. 265). Dewey expanded upon this idea, for when he argued that knowledge is a product of art, he asserted that "knowing" means making "a *certain* difference in reality" (1908, p. 47). On the face of it, this is an uncontroversial claim, especially in the modern scientific era. It is nonetheless a claim that challenges our intuition that knowledge is awareness of "what is"—our intuition that we cannot say that something "is" and hence profess knowledge of it if all we ever encounter is a disconnected chaos of transitory *qualia*. Dewey, of course, strove to satisfy the last part

of this intuition. After all, he did not claim that knowledge is a product of haphazard changes that ensue from random banging about, but rather that it is a product of changes engendered by means of art; and art, as discussed, is a means by which we manipulate things in such a way that particular incidents integrate into arrangements or structures that hold together and in this sense endure as a whole.

From the standpoint of Platonic philosophy, epistemology and ontology are not distinct. This means that the conditions under which we can know things are also conditions under which they can be said to have “reality” (e.g., Plato, *Rep.* 511d-514a; *Thea.* 186b). So in addition to arguing that knowledge is awareness of “what is,” Platonic philosophers have maintained that reality is “that which is.” Consequently they have concluded that reality, like knowledge, is beyond change. Dewey similarly suggested that conditions under which we can know things are also conditions under which they can be said to have “reality,” but since he held that knowing means changing things, he posited that “reality be itself in transition” and that things can “undergo change without thereby ceasing to be real” (1908, p. 40). In doing so, he made yet another seemingly uncontroversial claim, especially when considered in the context of the modern scientific era. In actual fact, however, this is a claim that many have affirmed and denied in the same breath. A case in point is that some cite quantum mechanics as an illustration of how observing and therewith coming to know reality changes it, yet then insinuate that this means we can never know “how things really are.” For Dewey, this is a misunderstanding. We can know “how things really are,” he insisted, because *things really are* in dynamic, interacting systems of which we are participants, and when we

introduce changes to a system, we can observe and therewith come to know how it *really* behaves (see 1917, pp. 43-44).

Dewey's account was anti-sceptical for the obvious reason that it affirmed that we can know reality. Yet it was also anti-sceptical because it countered views that lead to scepticism. Some, for example, hold that the everyday world of change is a *merely* apparent world, arguing that the real world is a domain of fixed laws and mathematical certainties. That we can come to know reality by discovering laws and suchlike is meant to be of consolation, but it does not alter the fact that we are asked to mistrust firsthand experience. Others grant that reality is in transition. They add, however, that we cannot talk coherently about anything if our concepts constantly change to keep pace with the flow of reality; that concepts must to some extent be fixed if we are to develop bodies of knowledge; and that knowledge, therefore, is a perversion of reality, albeit a useful one. According to Dewey, both of these outlooks arise from a failure to appreciate that knowledge is a product of art. The first fails to recognize that laws do not express "any matter of fact existence" (1925, p. 148). Rather,

...their ultimate implication is application; they are methods and when applied as methods they regulate the precarious flow of unique situations. Objects of natural science are not metaphysical rivals of historical events; they are means of directing the latter. Events change; one individual gives place to another. But individually qualified things have some qualities which are pervasive, common, stable. They are out of time in the sense that a particular temporal quality is irrelevant to them. If anybody feels relieved by calling them eternal, let them be called eternal. But let not "eternal" be then conceived as a kind of absolute perduring existence or Being (1925, p. 148).

The second view similarly fails to recognize that concepts are not principally representations of reality, but instruments through which we cognitively and physically interact with reality, changing and rearranging it in such ways that it becomes intelligible and therewith potentially knowable (see 1929b, p. 206).

Conclusion

Menand's "Story"

In 2001 Farrar, Straus and Giroux of New York published what proved to be the most celebrated non-fictional book of the year, Louis Menand's *The Metaphysical Club: A Story of Ideas in America*. By year's end the book had been reprinted six times, and in 2002, the author won both the Pulitzer Prize in history and the Francis Parkman award from the Society of American Historians for the best book on history published the year before. Menand was appointed Professor of English and American history and literature at Harvard University in 2003, reinforcing the esteem his work had garnered.

The breadth and depth of appreciation for the book was unprecedented for a text of its kind, for despite its subtitle, the "story of ideas" told by Menand centered specifically upon ideas that were philosophical. Although an historian of English literature at the Graduate Center of the City University of New York at the time, rather than a philosopher, the author had written a sweeping yet detailed account of how the "way of thinking" of pragmatism took root, grew and flowered into dominance from within the lives of four philosophers during the half-century after the Civil War: Oliver Wendell Holmes, William James, Charles S. Peirce and John Dewey.

It was Menand's view that these men "...together . . . were more responsible than any other group for moving American thought into the modern world" (pp. x-xi). They were responsible, however, not only because of what they said, but also because of how what they said *answered* the concerns of the Post-Civil War culture in which they lived:

The Civil War swept away the slave civilization of the South, but it swept away almost the whole intellectual culture of the North along with it. It took nearly half a century for the United States to develop a culture to replace it, to find a set of ideas, and a way of thinking, that would help people to cope with the conditions of modern life (p. x).

If we strain out the differences, personal and philosophical, [that Holmes, Peirce, James and Dewey] had with one another, we can say that what these four thinkers had in common was not a group of ideas, but a single idea—an idea about ideas. They all believed that ideas are not “out there” waiting to be discovered, but are tools—like forks and knives and microchips—that people devise to cope with the world in which they find themselves. They believed that ideas are produced not by individuals, but by groups of individuals—that ideas are social. They believed that ideas do not develop according to some inner logic of their own, but are entirely dependent, like germs, on their human carriers and the environment. And they believed that since ideas are provisional responses to particular and unrepeatable circumstances, their survival depends not on their immutability but on their adaptability (pp. xi-xii).

But what *kind* of idea was this? How in the most general sense, that is, ought we to construe its nature and effect? Menand was unequivocal: the “idea about ideas” of Holmes, James, Peirce and Dewey was a form of scepticism.

The idea was, to put it another way, “...that ideas should never become ideologies—either justifying the status quo, or dictating some transcendent imperative for renouncing it,” and this, as Menand went on to say

[was i]n many ways . . . a liberating attitude, and it accounts for the popularity Holmes, James and Dewey (Peirce is a special case) enjoyed in their lifetimes, and for the effect they had on a whole generation of judges, teachers, journalists, philosophers, psychologists, social scientists, law professors, even poets. They taught a kind of *skepticism* that helped people cope with life in a heterogeneous, industrialized, mass-market society, a society in which older bonds of custom and community seemed to have become attenuated, and to have been replaced by more impersonal networks of obligation and authority. But *skepticism* is also one of the qualities that make societies like that work. It is what permits the continual state of upheaval that capitalism thrives on (xii; emphasis added).

Remarkably, Menand had come to this conclusion without arguing in any way, save in passing, for the validity of any of the philosophical claims that Holmes, James, Peirce or Dewey had made. He was open about this, describing his book as

...an effort to write about these ideas in their own spirit—that is, to try to see ideas as always soaked through by the personal and social situations in which we find them. Holmes, James, Peirce and Dewey were philosophers, and their work is part of the history of abstract thought. Its philosophical merits were contested in its own time, and they are contested today. This book is not a work of philosophical argument, though; it is a work of historical interpretation. It describes a change in American life by looking at the change in its intellectual assumptions (p. xii).

Having studied carefully what the four men said, when they said it, and having become clear thereby—or so he thought—about what they had meant, Menand had then summarized what seemed to him the unequivocal consequence of it. Valid or not, the claims of pragmatism had been sceptical.

The Moral of the “Story”

Why have I concluded this dissertation by recounting the method, substance and reception of Menand’s book? For reasons that may enable readers of this dissertation to delimit the scope and nature of what I hope to have accomplished by writing it, how and why.

Menand’s account of the origins of pragmatism and of the supposedly sceptical nature of its effects will almost assuredly dominate the consciousness of literate readers for years to come. His book on the ideas of James, Dewey and the others, that is, has proven through its design and construction to be accessible, informative and thus publicly

influential. It has done so in a way that both James and Dewey believed the best works of philosophy ought to be, Menand having represented what he took to be their philosophical ideas by combining something like the historical sense of Dewey with the linguistic fluency of James.

Pragmatically speaking, therefore, Menand did something right by attempting to capture what pragmatists meant by saying what they said when they said it, while refusing to succumb to the temptation to argue prematurely for or against the validity of it. He seems to have sensed, albeit unknowingly, that Collingwood had been correct when insisting, three-quarters of century ago, that we cannot—without begging the question—test any claim for validity until we comprehend what a person meant by saying it; and to comprehend this, we must register beforehand the unique problem that the person intended to solve. Our problems determine the meaning of whatever we say or do to solve them, not the reverse.

Having reconstructed my own account of the problems that provoked James and Dewey to say what they said, however, and touched upon those that incited Peirce, I am compelled to conclude that Menand drew the wrong conclusion about what pragmatists understood themselves to have been doing. Classical pragmatists, to be sure, held that we can never be certain that an idea is true. They maintained, moreover, that ideas should be accepted on a provisional basis and renounced if they become unserviceable. James captured this attitude in his notion of “will to believe,” for by virtue of inviting us to accept beliefs that “work,” his notion also encourages us to abandon those that do not. The notion, to put it another way, was intended to expand the range of what we can

rationally believe, without dictating what we specifically ought to believe. Yet if scepticism is, as Menand has suggested, an attitude that cultivates a “continual state of upheaval,” then classical pragmatists were profoundly anti-sceptical. James, after all, did not call his notion the “will to disbelieve,” and Peirce did not title one of his most famous essays, “How to Render Our Ideas Doubtful,” but rather *How to Make Our Ideas Clear*. While James and Peirce did, in these instances, invite us to relinquish unserviceable beliefs, their specific aim was to supply means by which we might become more secure in our beliefs—means, therefore, by which we escape the personal state of upheaval that would come if we found ourselves unable to believe anything at all.

Earlier in this dissertation, I suggested that James might have renamed his notion the “will to make,” and this too is instructive. Pragmatists emphasized that we make the worlds that we encounter, and by suggesting that the making of art exemplifies how we do so, they emphasized building over demolition. When located in the context of the problems they were trying to answer, the claims of pragmatists were constructive tools. They were intended to diminish rather than reinforce sceptical habits of thinking, philosophical and otherwise. Pragmatists did, as Menand observed, respond to upheaval. He emphasized the Civil War. I have mentioned traditional philosophical ideas that had lost their constructive power, and had, contrary to the intent with which earlier thinkers deployed them, become a source of hopelessly sceptical outlooks. Pragmatists thus pursued an expressly anti-sceptical program when, on the basis of the claim that we make our worlds, they denied we can secure universal and immutable essences, that we can

know reality without altering it and that we can judge truth on the mere basis of correspondence to facts.

I have attempted within this dissertation to unpack within their historical context the claims of James and Dewey with respect to the centrality of the reconstructive practices of art to those of experience. I have worked hard to position what they said within the debates of their time—to measure them, that is, against the concerns that occasioned them—for, as Collingwood would have insisted, what James and Dewey meant by saying what they did would otherwise be undeterminable. At the same time, I have considered what they meant to do and what they achieved from the standpoint of debates, outlooks and circumstances that persist in our own time, for as Dewey would insist, it is only from the standpoint of where we have arrived and with the aid of currently available resources that we can coherently register anything at all. By connecting what classical pragmatists have said to what others have said since, I hope to have conveyed to readers a secure and provocative sense of how useful their suggestions remain, when understood exactly, as precursors to the answers that we in turn must construct to the questions of comparable kind that we face.

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