

## Does "The Knowing" Alter "The Known"? On the Troublesome Relation of Facts and Ideas in a Deweyan Epistemology.

Chris McCarthy  
University of Iowa

### I. Introduction

In the process that has come to be called the "construction of knowledge," what is it, exactly, that gets made? How much control over the product do the "constructors" actually have? And to what extent is that which is "known," i.e., the product of the inquiry, dependent upon that which is outside the control of the knowledge seekers?

One might take it that the pragmatic view on these matters could be readily summed up, in the following, simplified, theses:

1. Knowledge is made, not discovered.
2. Knowledge, a product of contingent human efforts in unique concrete situations, is neither general nor secure, nor can anything be known with certainty.
3. There is no 'antecedent reality' that exists prior to being known, which determines what can come to be known.

These theses seem to be widely taken as part and parcel of a classical pragmatic interpretation of epistemology and ontology, to be views that Dewey would have endorsed. This, I would take it, would be a "popular" account of a pragmatic view of "knowing and the known."

I have argued at length elsewhere<sup>1</sup> that each one of these statements is wrong, that, taken together, they constitute a caricature of a Deweyan epistemology, and that a philosophical pragmatist has strong reasons, generated within the pragmatic tradition, for rejecting each and every one of these claims. The argument is that pragmatic inquiry, of the sort explicated most thoroughly by Dewey, requires a grounding in an ontological realism of the sort most thoroughly explicated by Peirce. Without such grounding, passages in Dewey can be taken as indicating a view very much like a modern Idealism, i.e., there is no antecedent reality to be known—an interpretation which Dewey emphatically disavowed. The associated claim is that Dewey did indeed set out the required ontological thesis, contrary to currently popular accounts. In short, neither Dewey nor Peirce would have endorsed the above theses, and that the view represented in this version of "pragmatism" is implausible and should be revised. For there

is a missing element, that when set in place changes the picture considerably. And that missing element, to paraphrase Peirce, is Reality.

The claim I've made is that there is an often overlooked ontological realism<sup>2</sup> that is properly associated with the Deweyan pragmatic inquiry, the implication of which is that "what" might be discovered in inquiry, what might be known, is in an important sense set in advance, and is independent of the beliefs, hopes and preferences of the inquirer(s). The "production of knowledge," in virtue of this external limiting determination, is indeed the production of that which is stable, secure, general, and, in one very important sense, "transcendent" of the concrete particulars of its originating conditions.

This is a rather controversial thesis. In explicating it further here, I shall examine several crucial issues, developing what I take to be the best "Deweyan" interpretations, and set these in contrast to the contrary positions on a "Deweyan realism" advanced recently by Cunningham and by Garrison.

### II. On the Alteration of the Known, by the very act of Knowing

Does act of knowing alter what is known, and if so, how? Cunningham sets out clearly the view that is here contested. He writes "...by engaging with brute events in the process of inquiry, inquirers *alter reality* by conferring upon events attributes which were not previously there. Reality is not 'mind-independent'; rather, mind and reality are intricately interwoven...."<sup>3</sup> There are several senses in which such a claim is quite simply true, and eminently in keeping with Deweyan pragmatism. For one, it is quite true, albeit in a trivial sense, that the process of knowing "changes" the unknown fact into the fact-known. The "unknown fact" here should be understood as a true contrary-to-fact conditional, i.e., *If it were the case* that operation *x* were to be undertaken in the situation, an alteration *a* in the situation would occur. This unknown fact comes to be known when (and only when) the operation is in fact undertaken and alteration *a* is observed

to occur. The "situation" is to be understood here transactionally, i.e., to include the agent within the situation—in this sense, the behaviors of the agent, including the cognitive behaviors, are simply one aspect of the situation, each as fully real as any other. When the agent takes overt action, it is certainly true that the situation undergoes change. What undergoes no change, though, is the truth of the contrary-to-fact conditional, the truth of which arises from the existential facts of the situation.

A second, somewhat more substantive sense the "alteration of reality" can be developed, which would leave us, again, with a true statement. Consider that, for Dewey, that which is, or might be, known is neither a "thing," nor a quality of things, but rather a *connection* between and among things and qualities. Dewey writes,

Things in their immediacy are unknown and unknowable, not because they are remote or behind some impenetrable veil of sensation of ideas, but because knowledge has no concern with them. For knowledge is a memorandum of conditions of their appearance, concerned, that is, with sequences, coexistences, relations.<sup>4</sup> (italics added)

In the process of coming to know, a brand-new connection of sorts is forged, between knower and known. In knowing, the person is newly equipped with an effective cognitive tool, a means for actively intervening in new ways in the existential situation. So, in this sense, the ongoing situation is indeed changed. And, since the new relations between knower and the rest of the situation are as fully real as any other set of relations, we may truly say that there has occurred a change, a growth in "what is," a growth in reality. This growth in the connections that obtain between existents, and hence growth in what "is," is infinite. So, in every act of knowing, the world is indeed "changed," in this limited sense.

But, it is again important to note what is *not* changed by the act of knowing. What is *not* changed by the knowing are the connections, the sequences, the relations among existential things, the "conditions of appearance," that *themselves* have come to be known. This is because those known connections are "real," which is to say that they exist independently of any knower, and hence the act of knowing is incapable of affecting in any way the connections that are, or may come to be, known.

I have employed here Peirce's sense of the meaning of the term 'real'. One might well question whether that is legitimate, whether Dewey would have, or did, adopt a similar sense. The claim made here is that those connections are real for both Peirce and for Dewey, although that realistic aspect is seldom stated explicitly by Dewey. The question of the relation for Dewey between "reality" and what is known, and whether Dewey follows Peirce in this matter, must be taken up.

### "Reality," Its Relation to Truth and Knowledge, for Peirce and Dewey

Peirce very emphatically states the relationship between knowledge of reality, and reality itself, debunking in his own inimitable style the notion that the knowing act can alter real objects. He writes,

It appears that there are certain mummified pedants who have never waked to the truth that the act of knowing a real object alters it. They are curious specimens of humanity, and, as I am one of them, it may be amusing to see how I think. It seems that our oblivion to this truth is due to our not having made the acquaintance of a new analysis that the True is simply that in cognition which is Satisfactory.<sup>5</sup>

Peirce here clearly rejects a Jamesian conception of truth. Peirce's own view on the meaning of "truth" is based upon, and makes quite clear, his underlying ontological realism. Peirce reprises the thesis originally presented in "The Fixation of Belief," setting out his view of the relation reality to truth:

My paper of November 1877, setting out from the proposition that the agitation of a question ceases when satisfaction is attained with the settlement of belief...goes on to consider *how the conception of truth gradually develops from that principle under the action of experience; beginning with willful belief, or self-mendacity, the most degraded of all intellectual conditions; thence rising to the imposition of beliefs by the authority of organized society; then to the idea of a settlement of opinion as the result of a fermentation of ideas; and finally reaching the idea of truth as overwhelmingly forced upon the mind in experience as the effect of an independent reality.*<sup>6</sup> (italics added)

Central to Peirce's conception of truth is the effect on the inquirer of an "independent reality"—a redundant phrase, actually, for in Peirce's view, that which is real is simply that which is what it is and has the characteristics it has, regardless of anyone's thoughts about the matter, regardless even of *everyone's* thoughts. If "truth" is determined by the real facts, and those are independent of human belief, then truth itself is independent of human belief.

Does this represent a "pragmatic" thesis? As it is drawn directly from a careful reading of Peirce, it certainly represents a "pragmaticistic" thesis, and would have to be accepted as "pragmatic" to whatever extent one accepts Peirce as "pragmatic." It is definitely *not* a Jamesian thesis. But is it a Deweyan one? This is a bit hard to determine, since in Dewey's writing one readily can find references to the need to reject "Reals," and "Reality." Taken in context, it generally is clear that this rejection is *only* of a "Reality" construed

as a separate and superior, complete and final Realm, existing in splendid isolation from the mundane world of human experience. This is not the sense in which Peirce uses the term reality; his is a much more straightforward sense. In Peirce's conception, human beings, and all their experiences and behaviors, including actions, perceptions and thoughts, are as full real as any other sort of event. There is no postulation of a "separate" realm of superior Reality. Instead, we see in Peirce simply a natural, common-sense ontological realism.

How close is Dewey to Peirce, on the issue of a naturalistic common-sense realism? Dewey seems to make the matter reasonably clear, in an article entitled, "The Realism of Pragmatism." He writes: "Speaking of the matter only for myself, the presuppositions and tendencies of pragmatism are distinctly realistic."<sup>7</sup> Later, Dewey concludes, "Instrumentalism is thus thoroughly realistic as to the objective or fulfilling conditions of knowledge...psychical things...stand for and thus accomplish what things would accomplish—viz., mutually realistic significance—if they [the things] were only there."<sup>8</sup>

That is, for Dewey there is a relationship of "realistic significance" that obtains among things; and, when one or more of those things are absent, as is typically the case in a problem-situation, we employ psychical "stand-ins," ideas, in their place. The fulfilling conditions of knowledge—which test the truth of the claim—are *objective*; the things we are working with have, or do not have, the significance we attribute to them in thought, and our ideas "pan out," or they do not, accordingly.

Dewey gives us an example of knowledge, wherein "smells...become the object of knowledge," and concludes:

Just and only because odors (or any group of qualities) are parts of a connected world are they signs of things beyond themselves; and only because they are signs is it profitable and necessary to study them *as if* they were complete, self-enclosed entities. In the reflective determination of things with reference to their specifically meaning other things, experiences of fulfilment, disappointment and going astray inevitably play an important and recurrent *role*. They also are realistic facts, related in realistic ways to the things that intend to mean other things and to the things intended.<sup>9</sup>

Here again we have reference to the naturalistic ontological realism as a position that is basic to Dewey's conception of the knowing relation. We have not only "real" things, but real relations, connections, between things.

The question of the sort of realism properly associated with Deweyan pragmatism has been taken up recently by Garrison. Although Garrison sets out on an important task, to present educational researchers with an overview of the

realism and its implications for our understanding of knowledge, some of the common misunderstandings may well result inadvertently from Garrison's explication. For Garrison tells us early on that Dewey "held a constructivist view of knowledge," and a "doctrine of humankind as truth maker."<sup>10</sup> And such phrases lend themselves to an exaggerated view of the role of human thought in "determining" what shall be true, and thence what shall be known.

Garrison sets out Dewey's principal theses succinctly and accurately. But there is one juncture at which a significant error creeps in. Garrison sets out an interpretation of Peirce's position on reals, which he then attempts to distinguish sharply from Dewey's. Garrison notes that Dewey followed Peirce in "preserv[ing] a notion of 'objective reference',"<sup>11</sup> but then asserts that Dewey "rejected...Peirce's objectivism, his allegiance to the existence of fixed eternal structures, for example, essences and necessary natural laws, 'fated' in advance to be found by continued inquiry."<sup>12</sup> Yet recourse to the article in question, Dewey's "The Pragmatism of Peirce,"<sup>13</sup> shows that this is not quite the case.

Indeed, in the very paragraph Garrison has cited, Dewey *endorses* a view of the nature of inquiry, reality and truth different in no essential respect from that of Peirce. The relevant passage from Dewey, is:

Finally, both Peirce and James are realists. The reasonings of both depend upon the assumption of real things which really have effects or consequences. Of the two, Peirce makes clearer the fact that in philosophy at least we are dealing with the *conception* of reality, with reality as a term having rational purport, and hence with something whose meaning is itself to be determined in terms of consequences. That 'reality' means the object of those beliefs which have, after prolonged and cooperative inquiry, become stable, and 'truth' the quality of these beliefs is a logical consequence of this position.<sup>14</sup>

Note well that the *consequences* seen in human practice, which constitute the meaning of the term 'reality' according to the pragmatic maxim, *depend upon* the ontological assumption of "real things which really have effects or consequences." It is an objective reality that "forces" our inquiry towards certain conclusions. It is in the penultimate sentence of this paragraph that Dewey obliquely endorses the Peircean position. He writes,

And while my purpose is wholly expository, I can not close without inquiring whether recourse to Peirce would not have a most beneficial influence in contemporary discussion. Do not a large part of our epistemological difficulties arise from an attempt to define the 'real' as something given prior to reflective inquiry *instead of* as that which reflective inquiry is forced to reach and to which when it is reached belief can stably cling?<sup>15</sup> (emphasis added)

The second, commended view is that of Peirce; so, it is clearly not Peirce whom Dewey excoriates here as proponent of the notorious "philosophic fallacy" of "givens"! It is that old opponent, the "classic" traditional philosophy, the philosophy which accepts the "given-ness" to "Mind" of "Truth," via "Intuition" and/or "Reason." *Both* Dewey and Peirce are decisively rejecting that long-standing philosophic fallacy.

Consider the meaning here of the term 'given'. 'Given' does not mean "existing" prior to inquiry—rather, it means acquired/attained/received *directly* by the mind. Dewey holds that the notion of "Mind," as a special sort of thing existing in a peculiar realm of its own, blessed with ability to acquire knowledge of truths, as "givens," by some special, non-experiential capacity peculiar to itself, is nonsense. He rejects any and all claims that, in this sense, knowledge of anything is "given," prior to the *activity* of reflective inquiry. It is in this sense that Dewey rejects the "attempt to define the 'real' as something given prior to reflective inquiry..." Dewey maintains instead that we *should* define the "real," as Peirce did, as "that which reflective inquiry is forced to reach, and to which, when it is reached, belief can stably cling..."<sup>16</sup> Key words to note here: *forced to reach*—inquiry is said here, by Dewey, to be "forced to reach" something, and that something is that which is "real." "Belief" is able to stably cling to that real thing. It is abundantly clear that inquiry is a human activity, and, as such, it will proceed, or not proceed, as those humans engaged in it decide. But, if the inquiry does proceed, and proceeds long enough, and if it is genuine, it will find itself "forced" to reach certain conclusions. Or, more precisely, we who are engaged in the inquiry will find *ourselves* forced to reach certain conclusions. What is it that could force upon us, whether we will it or no, certain conclusions? Peirce puts it well—"the new concept here involved is Reality."<sup>17</sup> Dewey seems here to be simply endorsing the Peircean view.

So Garrison is correct to note that Dewey here endorses some sort of realism. But he is incorrect to see this as a repudiation of Peirce, and incorrect to see Dewey as in some degree conflating, if not equating, "objectivity" and "solidarity." It is not the case that objectivity is, or "involves" solidarity. Rather, it is the objectivity of the real that (one may hope) leads to the eventual happy outcome of a human solidarity in belief. Provided, of course, that we do choose to engage in that process of inquiry. One may well wonder whether Dewey's later views continue in this vein—that they do, will I hope become clear in the course of this study.

### *The "Immediate" Becomes the "Generic"*

There is a third sense in which the activity of knowing might be construed as introducing a "change." Dewey writes

that the "practical arts" represent the first groping steps in knowing, in "defining spatial and temporal qualities, transforming purely immediate qualities of local things into generic relationships."<sup>18</sup> That is, when we come to know, that which was for us experienced initially as purely immediate, a had or a felt experience, becomes "transformed" for us, through our taking of practical actions, into a thing with significance, a thing which points to something else, and in that sense is not "final." The "transformation," in this sense, is of our relationship to the other thing(s), from a primary to a secondary sort of experience, as we come to see the thing in its *general* connections in the world. But, note that we are not the creators of that generic significance. We are, as before, the discoverers of the real significance that the existential thing has actually had, all along. Indeed, Dewey writes that "the life-blood of modern science [the paradigm for Dewey of "knowing"] is discovery."<sup>19</sup>

We have established so far that the objects of knowledge are connections, connections that can be used by us in deliberately altering existential situations. The objects of knowledge are "an order of *relations* which serve as tools to effect immediate havings and beings."<sup>20</sup> (italics added) And, "physical science...reveals the state or order upon which the occurrence of immediate and final qualities depends."<sup>21</sup>

But we can take this one step further. These "ordered relationships," in Dewey's words, constitute "a mathematical, mechanical—or if you please—logical order..."<sup>22</sup> Further,

the instrumental nature of objects of knowledge accounts for the central position of laws, relations. These are the formulations of the regularities upon which intellectual and other regulation of things as immediate apparitions depends...elements vary independently of one another, but not independently of a *relation* to others, the relation or law being the constancy among variations. ...The inevitable consequence [of establishing a "knowing" relation] is the subjection of individuals or unique modes of variation to external relations, to laws of uniformity; that is to say, the elimination of individuality. Bear in mind the instrumental nature of the relation of elements, and this abrogation of individuality merely means a temporary neglect...in behalf of attending to conditions under which individualities present themselves.<sup>23</sup> (italics in original)

According to Cunningham, a Deweyan pragmatic account of knowing requires of us a focus on the "here-and-now," in space and time. Cunningham's claim is that knowledge is of the particular, the concrete, for "[w]e are *always* in the circumstances we are in, and we can never be in a circumstance that we are not in. We are always in our own place in space and time. We can never test a knowledge claim except in the actual circumstances that define the boundaries of our lives."<sup>24</sup> But this is precisely what Dewey rejects as

characteristic of the "knowing" relation. In the process of "knowing," we must establish an awareness of connections that are "out of time." And this is precisely the phrase Dewey uses.

Timeless laws...are methods, and when applied as methods they regulate the precarious flow of unique situations. 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 any body feels relieved by calling them eternal, let them be called eternal...[which is to denote the] irrelevance to existence in its temporal quality. These non-temporal, mathematical or logical qualities are capable of abstraction, and of conversion into relations, into temporal, numerical and spatial order.<sup>25</sup> (italics in original)

And, Dewey continues, "...this order, which is to be discovered by inquiry and confirmed by experimental action, is the proper object of knowledge."<sup>26</sup>

So, it appears that the process of coming to know is for Dewey not only a matter of discovering that which is real, which is to say, connections which are independent of human thinking or knowing. It is a process of discovering real *general* relations, laws, the "constancy among variations." It is important to note that these real relations are not properly termed "existents"—that is, we have no need whatsoever to postulate, with the Greeks, a realm of what Dewey calls "absolute perduring existence or Being"<sup>27</sup> wherein these relations might somehow "exist" as a "Truer Reality"—but the general relations are nonetheless *real*, in the suggested Peircean sense.

Cunningham quotes Dewey in a passage that would seem to counter the claim made here. "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..."<sup>28</sup> But, Dewey makes it very clear in the passage that he is saying nothing to alarm the genuine natural realist—he specifies that one is required to be very careful of one's tenses:

Knowledge is not a distortion or perversion which confers upon its subject-matter traits which *do* not belong to it, but is [as Cunningham continues the quote]...an act which confers upon non-cognitive material traits which *did* not belong to it...Architecture does not add to stone and wood something which does not belong to them, but it does add to them properties and efficacies which they did not possess in their earlier state. It adds them by means of engaging them in new modes of interaction, having a new order of consequences.<sup>29</sup> (italics in original)

That is, brute events, which previously had any number of connections, but did not have connections to humans, as means to accomplish human purposes, in coming to be known come to have such connections. These relations to human lives are themselves real. Dewey writes: "experiences of fulfilment, disappointment and going astray...are realistic facts related in realistic ways to the things that intend to mean other things..."<sup>30</sup> Further,

[w]hen these fulfilments and refusals *are reflected upon* in the determinate relations in which they stand to their relevant meanings, they obtain a quality which is quite lacking to them in their immediate occurrence as just fulfilments or disappointments; *viz.*, the property of affording assurance and correction—of confirming and refuting.<sup>31</sup>

So, what is forged is a brand-new set of human-to-otherthing relationships, as we recognize the safety (or lack thereof) in employing the thing as a sign, of engaging in activities that depend for their success on that discovered significance.

A fourth sense of "change in reality" is the most fundamental for Deweyan epistemology. What changes, most obviously, when knowing enters the picture, is the actual, ongoing, objective state of affairs. It is the future course of experience that changes as a result of the "knowing" activity. For, at this point, when knowledge of (non-cognitive) events/things is established, that new set of connections between a) human events and purposes, and b) non-cognitive events is created. And *this* leads to an existential alteration in the course of the developing situation. Specifically, that which happens, given the new connections, the knowledge, is *different than* that which would have happened, without the knowledge. But this is only to say that knowledge *is* a tool, a real and effective tool, that it can be and often is used to alter real conditions. And this is the fundamental sense in which "knowing" introduces "changes" in the real world, in a Deweyan epistemology.

As there is no end to the growth of real "connections of human use" over time, there is no end to the growth of knowledge, and no end to the changing reality, and, particularly, no end to the changes in future states of affairs. In Dewey's words,

*The increments of meaning which things are constantly taking on is as much the product of psychical existences, as the added significance of words is the result of their use in propositions, i.e., with a context. They [psychical existences, e.g., ideas] are the media of effecting the transformation of conflicting, unsatisfactory, and consequently fragmentarily significant situations, into situations where things are surely and reciprocally... significant of one another. Hence the free, the indeterminate, the growing, the potential factor in reality.*<sup>32</sup> (italics in original)

### *The Fictive and the Real*

So, to recap—we have seen that the knowing relation occurs with person's recognition of the real interconnectedness of the things/events in the world, particularly when general relations among things can be discovered. But we must draw a sharp distinction between a) relations that are real, and b) those that are fictive. Only the former can properly said to be "known"; only the latter can properly said to be "given" by us to the things or events into which we inquire.

Cunningham sets out clearly the (potentially) problematic point, quoting Dewey: "the business of reflection is to take events which brutally occur and brutally affect us, to convert them into objects by means of inference as to their probable consequences. These are the meanings imputed to the events under consideration."<sup>33</sup> There is a *sense* in which we, in the processes of knowing, "convert brute events into objects, by means of inference as to their probable consequences." To understand this sense, we must note that Dewey has established a stipulated meaning for the term 'object'. An object is to be understood as, simply, "an event with meaning." Given this, it is merely tautological to state that, in (metaphorically) attaching a "meaning," i.e., a significance, a stable connection with other events, to some event, we ipso facto "convert" the event into an "object."

But, if there is to be *knowledge*, that meaning, that imputed significance, must be real, which is to say, it must be a discovered meaning. We, by our own powers, cannot in any way "add" real, objective significance to (non-social) events. We can add whatever *fictive* significance we desire, of course, and often do. But, such a move cannot give us knowledge, because such fictive significance cannot fulfill the *office* of knowledge, namely, to provide secure means of predicting and controlling future events. That office can only be fulfilled when "knowledge" is taken to be restricted to a consciousness of real relations. Dewey writes that "while there is no knowing without perception of meaning, yet...having meanings and rolling them over as sweet morsels under the tongue...[is]...not knowing."<sup>34</sup> Note that Dewey explicitly states, in the passage Cunningham quotes above, that it is the *probable consequences* of the brute events that constitute the meanings we, properly, impute to them. And in doing so, we develop, from the brute events, "scientific-objects," having "cognitive meaning," which can be tested objectively for validity or lack thereof. Dewey consistently maintains the necessity of discovering real connections to find a meaning in the event, and thus to know "event" as an "object." He says:

note that bare occurrence in the way of having, being, or undergoing is the provocation and invitation to thought—seeking and finding unapparent connections, so that thinking

terminates when an object is present...when a challenging event is endowed with stable meanings through relationship to something extrinsic but connected.<sup>35</sup> (emphasis added)

"Knowing," for Dewey, requires that one check that those meanings "imputed" to events have indeed been discovered, and are not imagined or "fanciful." And one performs these checks by engaging oneself, as a participant, in the objective series of events. One acts on the assumption of the reality of the hypothesized connection, the imputed significance. And one observes the success, or failure, of that action to produce the anticipated change in the existential situation. When it comes to one's simple, "gross" ideas, one need do no more in the way of action than to simply live life—one will then observe such fundamental connections as that water slakes thirst, and food satisfies hunger. For the testing of more complex ideas of meanings, one requires the more complex resources of a community. In such complex situations,

effective participation [in the events] ...depends upon the use of extra-organic conditions...namely, tools and other persons, by means of language spoken and recorded. Thus the ultimate buttress of the soundness of all but the simplest ideas consists in the cumulative *objective appliances and arts* of the community...<sup>36</sup>

These objective appliances, e.g., thermometers, electron microscopes, cyclotrons, are "the indispensable tools of checking spontaneous beliefs and developing sound ones in their place."<sup>37</sup> And

without such objective resources to direct the manner of engaging in responsive adaptations, ideas...are at the mercy of any peculiarity of organic constitution and of circumstance; myths are rife and the world is peopled with fabulous personages and is the home of occult forces.<sup>38</sup>

Note that it is not the community's "solidarity" in belief that is required in order to sanction knowledge claims. Rather, it is the complex, sophisticated *apparatus* that is required, and the development of such a thing requires the resources and activities, and the time, of more than one person. It is the collective, cooperative, and communicated experience of the members of the community in a cumulative objective *action* that is required to support a knowledge claim.

The view that in the process of "knowledge construction," the community or the individual agent, through a creative act of his, her, or their mind(s), generates a "meaning" *de novo* in nature, and imbues static matter with a significance it did not have before, comes perilously close to precisely the "modern idealism" that Dewey argued consistently against. Consider Dewey's judgment on the fundamental error of modern epistemological idealism:

modern idealistic theories of knowledge...have apprehended the fact that the object of knowledge implies that the found, rather than the given is the proper subject matter of science. Recognizing the part played by intelligence in this finding, they have framed a theory of the constitutive operation of mind in the determination of real objects. But idealism...has mistranslated the discovery...It is not thought...which exercises the reconstructive function. Only action, interaction, can change or remake objects.<sup>39</sup> (emphasis added)

Note well that Dewey here rejects the "theory of the constitutive operation of the mind in the determination of real objects." This does not bode well for the thesis set out by Garrison, among others, that Dewey accepts a constructivist theory of knowledge, with "human beings as truth makers,"<sup>40</sup> such that "meanings are made through cooperative behavior."<sup>41</sup> *Objects* are made by human beings, frequently by human beings acting together in concert, in communication. But the *cognitive meaning* that objects have is a relation, or set of relations, holding among things/events, that must be discovered by the active process of thinking.

Moreover, in this passage we see, most clearly stated, Dewey's view as to the "reconstructive" relations of knowledge. Knowledge is a means by which the objective problematic situation existing at one moment in time is transformed, *by the actions of an agent* possessing the knowledge, into an improved, more desired objective situation at some later moment. And this new situation is other than it would have been, had not the agent intervened with his or her action. This is the full sense of the "reconstruction of experience." Knowledge possession permits a productive, and actual, objective change, in a predictable direction, to be made in future existential situations. It is in this simple way that "the world is altered" by knowledge. The world *is* changed, but in the ordinary, everyday way, by the *actions* of the agent, making use of his or her knowledge.

Does the pragmatist learn anything through the thinking process of the nature of the "antecedent" reality, of that which existed prior to the process? Dewey takes up this very issue, as it was raised by McGilvary's critique of Dewey's *Studies in Logical Theory*. McGilvary interprets Dewey as

insist[ing] that the *object of thought*, when it has emerged from the experience of stress and strain and appears in a subsequent tranquil experience as the result of pragmatic adjustment, must not be read back anachronistically into the time preceding the adjustment. The reader was therefore left to infer that no *truth* made out by intellectual labor is *to be held valid* of anything real that may have existed before that labor was ended.<sup>42</sup>

Dewey's response? "The reader was not only left to 'infer' this, the reader who did infer it was 'left.'"<sup>43</sup> Dewey explains that

all thinking is reflective, and that it is constitutive not of reality *per se* or at large, but only of such reality as has been reorganized through specific thinking, the reorganization finally taking place through *an action* in which the thinking terminates and by which it is tested. Thought is thus conceived of as a control-phenomenon, biological in origin, humane, practical, or moral in import, involving in its issue real transformation of real reality. Hence the text [*Studies in Logical Theory*] abounds in assertions of reality existing prior to thinking, prior to coming to know...<sup>44</sup>

Dewey concludes with the reiteration that it is the "*organic issue of thinking*," that is to say, action, that serves the "reconstructive" function. This function is no different than any other reorganization of the natural world, by human and non-human alike.

### "Meaning" vs. "Meaning"

What then of the common claim that, for a pragmatist, "meaning" is a social product, a thing not discovered, but made? Are there not a superabundance of passages in Dewey that clearly say just this? That we ourselves selectively add meaning to the events we experience, and in the process create our own specialized, culture-specific, personalized knowledges? To be sure. But there are problems that attend the word 'meaning'.

Dewey himself takes note of such problems. He writes: "...*meaning* has in philosophical usage become neither fowl, flesh nor good red herring. Only one who has familiarity with the literature of the subject can even begin to be aware of how confusing, obfuscating, and boring in its multiplicity of elaborations the word 'meaning' has become."<sup>45</sup> Dewey goes on, though, to commend the usage of 'meaning' as a term complementary to the term 'significance'. When events/things are recognized by an agent as significant, i.e., as indicators of what is to be expected, then the agent is able to engage in "meaningful" action. "Meaning," in this sense, names a "way or mode of skilled ways of organized action."<sup>46</sup>

The key point raised here is the necessity of carefully distinguishing between "meaning" understood as objective *significance*, "meaning" understood as a characteristic of linguistic signs, i.e., as "de-signation," and "meaning" understood as a characteristic of intentional intelligent action. As a characteristic of a linguistic sign, "meaning" is indeed for Dewey a culturally determined artifact, a selection from the

many objective meanings possible, or even a cultural creation. It is given by human agents to the term, and both linguistic sign and its referent are "created" in one and the same set of behavioral activities. This is the case both for ordinary language in common usage, and for scientific terminology. Dewey concludes "that 'meaning' is no more inherent in things as 'objects' in independence of human ways of behaving than it is inherent in the sounds and marks that are upon occasion surrogates for things in human behavior when the things are not directly present."<sup>47</sup>

The term 'meaning' often appears in this sense in Dewey's writing. For example, in *Experience and Nature*, Dewey writes: "Meanings do not come into being without language, and language implies two selves involved in a conjoint or shared undertaking."<sup>48</sup> But note well that Dewey is here talking about linguistic meanings, meanings of words, meanings of the same sort that one might well choose to explicate by application of the pragmatic maxim. Linguistic meanings are human artifacts, creations of ourselves in communication. They are quintessentially arbitrary, they can be whatever we want. (Provided only that there is some relevant "we" to participate in the communication—"at least two beings" are required.) So, when we "understand," it is *one another* that we understand. Or, more precisely, it is *one another's meanings* that we understand. And that is to say (the pragmatic maxim applied) we understand one another's conceptions of the practical effects to be expected. And, by this use of language, we find our ongoing cooperative activities much facilitated.

Garrison sets out clearly the Deweyan concept of linguistic meaning, but neglects to distinguish this "meaning" from the other "meaning," i.e., objective significance. We do find, in linguistic practices, the social construction of meanings, the social construction of language. But it is a great, and unwarranted, leap, to assert that in Dewey's analysis of linguistic meaning, we also find Dewey endorsing the "social construction of reality."<sup>49</sup>

"Meaning," for Dewey, is oftentimes not the same as "meaning," strangely enough. Language, words, have meaning, but it is things/events that have objective meaning. Consider the following passage:

There are things that claim to mean other experiences; in which the trait of meaning other objects is not discovered *ab extra*, and after the event, but is part of the thing itself. This trait of the thing is as realistic, as specific, as any other of its traits. It is, therefore, as open to inspection and determination as to its nature, as is any other trait. Moreover...it is upon this trait that assurance...depends.<sup>50</sup>

We must note clearly the *qualifier* that attaches to the claim that this sort of "meaning" is "not discovered." According to Dewey, the "trait of meaning other objects" is

"not discovered *ab extra*," it is, rather "part of the thing itself." The sense of this passage clearly is that this sort of meaning *is* to be discovered, and to be discovered not only within the situation, but to be discovered in the situation in precisely the same fashion as every other real trait of the things in the situation are to be discovered. So we have here a "discovery" of meaning in a *very strong* sense. And further, we have the claim that the reality of the "meaning" of things is the very fact upon which the assurance of scientific knowledge rests.

Now, it is certainly clear that Dewey did not consistently set out this view of meaning, as the first passages above attest. And given the fact that the two different usages are seldom clearly demarcated, it remains difficult to say in particular text passages precisely which sense is meant, except when the context makes it clear. There are places, though, where the two sorts of meaning are explicitly distinguished. For example, in "The Logic of Judgments of Practice," Dewey explains the point.

There is a great difference between meaning and *a* meaning. Meaning is simply a function of the situation: this thing means that thing; meaning is this relationship. A meaning is something quite different; it is not a function, but a specific entity, a peculiar thing...[that] may be used as a *substitute* for the thing inferred.<sup>51</sup> (italics in original)

"Meaning" is an objective, real relationship among things; "A meaning" is "an entity in reasoning," a "conception," an "idea."<sup>52</sup> And, "*a* meaning" is a newly created object, of a peculiar sort, but *not* peculiar because "mental." Dewey explicitly notes the ordinary, natural, physical nature of a meaning:

A sound or a visible mark is the ordinary mechanism for producing such a new object. Whatever the physical means employed, we now have a new object; a term, a meaning, a notion, an essence, a form or species...Such objects do not walk or bite or scratch, but they are nevertheless actually present as the vital agencies of reflection.<sup>53</sup>

A meaning is simply a tool to be used in the act of drawing inferences about objective meaning. These passages are clearly consistent with the claim that in the process of knowing, through the use of "meanings" (the plural of *a* meaning) we discover relationships that exist prior to our knowing, and these discovered relationships are the "meanings" (plural of "meaning") of the objects in the situation. This second sort of meaning is an entirely *objective* interpretation of meaning. Now, this is Dewey, not Peirce. But the position is quite consistent with Peirce's objective account of meaning, not at all the rejection that Garrison attributes to Dewey. To the contrary, we find in Dewey's position a "significance," and a



meaning, that is real—"The instrumental theory acknowledges the objectivity of *meanings* as well as of data."<sup>54</sup>

Of course, it is human beings who do the inquiring, who frame the questions, fund the research, see the implications, who have knowledge (perhaps), and *what* knowledge they/we have is determined by what inquiries are entered into. So, in this sense, the product of the search is a human product, dependent on the human process of seeking. But, *what is found out* in those human inquiries must be meanings that are real, if knowledge is to exist. The content of knowledge, that which is known by the agent, must be determined by that which is outside, other than, the agent. Dewey writes,

...as cognitional or intellectual, it is surely the business, so to say, of consciousness to be determined...solely in and through objects. Otherwise common sense is crazy and science an organized insanity...We have something which is beyond consciousness as cognitional and which determines consciousness as cognitional—literally determines it...and logically determines it, in that the content of knowledge must conform to conditions which the knowledge consciousness does not itself supply.<sup>55</sup>

### Pragmatic Realism, Truth and Knowledge

Many modern pragmatists consider it a cornerstone of pragmatic thought that "truth" is not to be interpreted in terms of a correspondence of belief with fact. In Rorty's version of pragmatism—see, for example, *Objectivity, Relativism and Truth*—he speaks of the pragmatists' rejecting those

...call them realists—[who] have to construe truth as correspondence to reality...[who] must construct a metaphysics which has room for a special relation between beliefs and objects which will differentiate true from false beliefs...[and] must argue that there are procedures of justification of belief which are natural and not merely local.<sup>56</sup>

The ontological realism identified here allows us to understand truth in a way that does not resort to a Rortian "solidarity" and a purely "local" notion of truth. Rorty, and others, seem to favor a Jamesian interpretation of truth, as, in Rorty's words "what is good for us to believe,"<sup>57</sup> which is quite far removed from Peirce's view, and from Dewey's. Dewey's explication of his functionalist view of logic, in the essay, "The Control of Ideas by Facts" supports this view. For example, Dewey writes:

...a functional logic...has never for a moment denied the *prima facie*, working distinction between 'ideas', 'thought', 'meanings', and 'facts', 'existences', 'the environment', and the necessity of a control of meaning by facts, if there is to be any question of truth and error...<sup>58</sup>

Dewey goes on to the example of the man lost in the woods, who tests his belief that (this is the way out) by engaging in overt action based upon the belief, and who is then able to compare, directly and unproblematically, the actual experienced results with the anticipated results. Dewey writes that, on finding a 'match',

...now, one may say, my idea was right, it was in accord with facts; it agrees with reality. That is, acted upon sincerely, it has led to the desired conclusion; it has *through action, worked out the state of things* which it contemplated or intended.<sup>59</sup> (underline added)

That is, *after* taking action, we are to compare the idea (the anticipated results of a proposed action) with the fact (the actual results of the proposed action, when taken). No metaphysical gymnastics are required for this comparison. And, when idea does in this sense "correspond" to fact, we may say, it is *true*, that action *x*, taken in situation A, leads to the development of situation B. It is in this important sense that beliefs, to be true, must "correspond" with facts, in a Deweyan epistemology.

How, then, in light of this pragmatic realistic interpretation of "truth," should we understand "knowledge"? In Dewey's example above, the man first "believes" that (this is the way out); after acting upon the belief, and finding a "correspondence" between anticipated results and experienced (actual) results, the man "knows" that (this is the way out). The relation of belief to fact is one that is itself "real," not subject to change. Although in this example, the same problem situation and proposed solution might never turn up again, *if it did*, the same belief would lead to the same experience, i.e., the belief continues, forever, to be "true" of that situation, that set of facts/relations. Whenever we have identified, via action, true beliefs, we have knowledge, in so far forth, and that knowledge, though partial, incomplete, must be taken as both general and as a secure basis of action, leading to predictable results.

Now, such a claim will surely sound profoundly anti-Deweyan. But, consider Dewey's own explication: Every existential situation is always a unique combination of the stable and the precarious. But knowledge of a situation "goes beyond" a simple recognition of the particulars of the situation, to the discovery of that in it which is general, secure and stable, indeed, "unalterable." According to Dewey,

...the precise and defining aim of knowledge...is to *secure* things which are permanent or stable objects of reference; which may be persistently employed without thereby introducing further conflicts. Unalterability means, precisely, capacity to enter into further things as secured points of regard, established contents and *quaes*, guaranteed methods...knowledge arises because of

the inherent discrepancy and consequent alteration of things. But it gives that alteration a particular turn which it would not take without knowledge—it directs alteration toward a result of security and stability.<sup>60</sup>

Dewey, of course, rejects the classical philosophical notion of a transcendent realm of pure, ideal, fixed and unalterable essence. But he does not fall into the all too common error of assuming that the "opposite" of what is rejected must in fact be the case; he does not assert an absence in the world of the secure, the stable, and the unalterable. It is precisely the office of inquiry to secure for us, for our future use, the knowledge of that which in an all too uncertain world, *is* stable and secure. And that object of knowledge is the objectively existing *reference* that obtains amongst existential things. Dewey writes that, while the classical position must be rejected,

Yet we may admit a certain empirical transcendence. The outcome of the doubt-inquiry-answer experience literally goes beyond the state of suspense and dissention out of which it originates. So far as the knowledge experience fulfills its functions, it permanently transcends its own originating conditions. It puts certain things out of doubt, rendering them reliable, economical and fruitful constituents in other more complex things. *This* transcendence is the very essence of the pragmatic empiricist's account of truth.<sup>61</sup>

Dewey doesn't, of course, neglect to note that contingency and uncertainty, and the evanescent character of events, is *also* real, a part of natural existence. But, he writes, "the contingencies of nature make discovery of [the] uniformities with a view to prediction needed and possible. Without the uniformities, science would be impossible."<sup>62</sup>

Is there a method for ascertaining which particular beliefs belong to the "known" category? There is, but it's not very exciting, nor is it easy and quick—it is simply the pragmatic method of inquiry. We are not and can never be, in a position, to "sneak a quick look" at the answers, to view directly some putative roster of real connections, and so take a short-cut to knowledge. But the route that we must take, though slow, is capable of locating those real connections, and thus is able to generate genuine instances of knowledge. This fact explains the constant ode to science that one sees, in both Peirce and Dewey. And, in practical affairs, we, none of us, I hope, doubt that there is such knowledge. That is, we act with confident expectations in any number of contexts, given our discoveries of "constancies" that may be relied upon, and are not disappointed. How do we distinguish that which is "known" from that which is not? Dewey's answer perhaps will suffice:

There is no way to know what are the traits of known objects, as distinct from imaginary objects, or objects of opinion, or objects of unanalytic common-sense, save by referring to the operations of getting, using and testing evidence....[A]nyone who professes to be concerned with finding out what knowledge *is*, has for his primary work the job of finding out why it is so much safer to proceed with just these objects, than with those, say of Aristotelian science.<sup>63</sup> (emphasis added)

And why *is* it? Peirce's answer is simple—the new conception here involved is Reality. Dewey's is a bit more wordy, but makes the same point. Even the most abstract of our intellectual "creations," mathematical distinctions:

...are not the creations of mind except in the sense in which a telephone is a creation of mind. They fit nature because they are derived from natural conditions. Things naturally bulge, so to speak, and naturally alter. To seize upon these qualities, to develop them into keys for discovering the meanings of brute, isolated events, and to accomplish this effectively...till they become economical tools...for making an unknown and uncertain situation into a known and certain one, is the recorded triumph of human intelligence.<sup>64</sup>

In short, given the pragmatic realism grounding the positions of both Peirce and Dewey, there *is* an antecedent reality, comprising "the facts," which includes real, and general, relations. And, these real relations, or objective meanings, which must be discovered, not made, constitute the proper objects of knowledge.

#### Notes

1. McCarthy, Christine, "When You Know It, And I Know It, What Is It We Know? Pragmatic Realism and the Epistemologically Absolute." PES Yearbook, 1996. In Press.
2. Not to be confused with an *epistemological* realism.
3. Craig Cunningham, "Really Living In Space-Time: A Response To Christine McCarthy" PES Yearbook, 1996. In Press.
4. John Dewey, *Experience and Nature*, Open Court Publishing, Chicago, 1925. p. 86
5. Charles Sanders Peirce, "Truth as Correspondence," *Collected Works*, Hartshorne and Weiss, ed. (Cambridge: Harvard University Press, 1934) 5.555.
6. *Ibid.*, 5.564.
7. John Dewey, "The Realism of Pragmatism," *Middle Works*, v. 3, p. 153.

8. *Ibid.*, p. 154.
9. John Dewey, "The Experimental Theory of Knowledge," *Middle Works*, v. 3., p. 117.
10. Jim Garrison, "Realism, Deweyan Pragmatism, and Educational Research," *Educational Researcher*, Jan-Feb. 1994, p. 5-13.11. *Ibid.*, p. 7.
11. *Ibid.*, p. 7.
12. *Ibid.*
13. John Dewey, "The Pragmatism of Peirce," *Middle Works*, v. 10, p. 71-78.
14. *Ibid.*, p. 77-78.
15. *Ibid.*, p. 78.
16. *Ibid.*
17. Peirce, *Collected Works*, 5.384.
18. John Dewey, *Experience and Nature*, p.128-129.
19. *Ibid.*, p. 152.
20. *Ibid.*, p. 136.
21. *Ibid.*
22. *Ibid.*
23. *Ibid.*, p. 145-146.
24. Cunningham, "Really Living In Space-Time." In Press.
25. John Dewey, *Experience and Nature*, p. 148.
26. *Ibid.*, p. 149.
27. *Ibid.*, p. 148.
28. Cunningham, In Press. Quoting Dewey, *Experience and Nature*, p. 381.
29. *Ibid.*
30. John Dewey, "The Experimental Theory of Knowledge," *Middle Works*, v. 3, p. 117.
31. *Ibid.*, p. 117-118.
32. John Dewey, "The Realism in Pragmatism," *Middle Works*, v. 3, p. 156.
33. Cunningham, In Press, quoting Dewey, *Experience and Nature*, p. 325.
34. Dewey, *Experience and Nature*, p. 332.
35. *Ibid.*, p. 326.
36. *Ibid.*, p. 347.
37. *Ibid.*, p. 348.
38. *Ibid.*
39. John Dewey, *Experience and Nature*, p. 157, 8.
40. Garrison, p. 11.
41. *Ibid.*
42. McGilvary, quoted by Dewey, "Pure Experience and Reality: A Disclaimer," *Middle Works*, v. 4, p. 122.
43. John Dewey, "Pure Experience and Reality: A Disclaimer," *Middle Works*, v. 4, p. 122.
44. *Ibid.*, p. 123.
45. John Dewey, "Importance, Significance and Meaning," *Later Works*, v. 16, p. 332.
46. *Ibid.*
47. John Dewey, "What Is It To Be A Linguistic Sign or a Name?" *Later Works*, v. 16, p. 305.
48. John Dewey, *Experience and Nature*, p. 226.
49. Garrison, p. 6.
50. John Dewey, "The Experimental Theory of Knowledge," *Middle Works*, v. 3, p. 125.
51. John Dewey, "The Logic of Judgments of Practice," *Essays in Experimental Logic*, (New York: Dover Publications, 1916), p. 431-432.
52. *Ibid.*, p. 432, 433.
53. *Ibid.*, p. 434.
54. John Dewey, *Essays in Experimental Logic*, p. 46.
55. John Dewey, "The Knowledge Experience Again," *Middle Works*, v. 3, p. 181.
56. Richard Rorty, *Objectivity, Relativism and Truth*, p. 22.
57. *Ibid.*
58. John Dewey, "The Control of Ideas by Facts," p. 236.
59. *Ibid.*, p. 240.
60. John Dewey, "The Knowledge Experience and Its Relationships," *Middle Works*, v.3, p.176.
61. *Ibid.*, p. 177.
62. John Dewey, *Experience and Nature*, p. 160.
63. John Dewey, *Essays in Experimental Logic*, p. 65.
64. *Ibid.*, p. 57.