Truth Deflationism, Technology, and Classical Pragmatism

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One aspect of the work of John Dewey that has so far received insufficient attention is his use of technical and technological metaphors as tools to resolve certain traditional philosophical problems. Two aspects this situation are particularly worthy of notice. First, the very attractive solutions that Dewey offered to some of the most tenacious philosophical problems were in fact a part of his broader philosophy of technology. Second, Dewey's robust account of truth as warranted assertibility is a key component in his larger technological project, namely, his commitment to experimentalism as a method of fixing belief. In this connection I will indicate what I take to be some striking differences between Dewey's views and some of the newer versions of pragmatism that exhibit a deflationary view of both truth and the role of philosophy with regard to what Dewey would today term "the problems of men and women."

I.

As we all know, debates among philosophers regarding the nature and status of abstract objects have been both plentiful and heated. That these debates are far from finished is evident in recent works far too numerous to list in this venue. Works by Platonist Roger Penrose (1989, p. 428)

and moderate realist Philip Kitcher[1] (2001, p. 53) provide just two handy examples.

For those interested in this issue, therefore, it might be good to recall that during 1915 and 1916 it was much on Dewey's mind. In a lecture to the Columbia University philosophy club in 1916, for example, Dewey addressed the status of logical objects. He began by pointing out that logical objects, *qua* logical, are most properly treated as having to do with inquiry and that inquiry is a public, objective activity which is bound to consider publically available evidence. Inference, he wrote, "belongs in the category where plowing, assembling the parts of a machine, digging and smelting ore belong – namely, behavior, which lays hold of and handles and rearranges physical things" (MW.10.91)[2] Not only does inference not have to do with anything "metaphysical," therefore, but any accompaniment to this process that might be termed a

[1] Here is Roger Penrose: "I imagine that whenever the mind perceives a mathematical idea, it makes contact with Plato's world of mathematical concepts." Penrose (1989, p. 428). Quoted in Anthony Gottlieb (2000, p. 170). For a brief summary of Kitcher's version of constructivism, see Philip Kitcher (2001, p. 53).

[2] Standard references to John Dewey's work are to the critical (print) edition, *The Collected Works of John Dewey, 1882-1953*, edited by Jo Ann Boydston (Carbondale: Southern Illinois University Press, 1969-1991), and published in three series as *The Early Works* (EW), *The Middle Works* (MW) and *The Later Works* (LW). These designations are followed by volume and page number. "LW.1.14," for example, refers to *The Later Works*, volume 1, page 14.

psychical or "inner" mental state is consequently irrelevant and just what Dewey termed "by-scenery."

Dewey's next step was to point out that inference has its own characteristic tools, and further that those tools are just "prior natural things reshaped for the sake of entering effectively into some type of behavior." (MW.10.92) What philosophers have termed abstract entities, therefore, are tools in the same much the same sense that hammers and saws are tools. To be sure, hammers and saws are concrete and tangible objects, and the number two and C. I. Lewis's strict implication are abstract and thus intangible objects. But Dewey's insight was that the purported ontological difference between what is abstract and what is concrete is only one of many possible fruitful distinctions that we human beings can make as a part of our effort to manage our environing conditions. When compared to the functional and behavioral senses in which a hammer and the number two are both tools that have been developed and deployed in order to perform certain tasks, for example, the abstract/concrete distinction recedes into the background.

(This is not, of course, to say that we can be confident that any particular abstract object would be able to perform much in the way of work. But the same thing must be admitted of tangible objects. To put the matter in more solidly Pragmatic terms, there are abstract objects that have very few conceivable practical consequences and therefore very little to offer in terms of meanings. But the same goes for tangible objects, some of which are more or less devoid of conceivable practical consequences and therefore devoid of much in the way of what we would term their meanings.)

So Dewey asked us to consider the possibility that "tools and works of art give the key to the question in hand: that works and tools of art are precisely the sought-for alternative to physical, psychical, and metaphysical entities." Further, such "manufactured articles do not exist without human intervention; they do not come into being without an end in view. But when they exist and operate, they are just as realistic, just as free from dependence upon psychical states (to say nothing of their not being psychical states) as any other physical things. . . ." (MW.10.92)

One of the consequences of this instrumentalist or "technological" hypothesis of Dewey's (as it seems appropriate to call it) is that it demonstrates how we can get logical objects by means

of a process that is naturalistic, constructivist, and, well, *technological*.

On Dewey's account, moreover, the manner in which tools and techniques are invented developed, and systematically and cognitively deployed, when they operate at their best, involves a thoroughgoing experimentalism in which truth, or warranted assertibility, is a projected outcome. In other words, Dewey's account of how we are able to arrive at judgments that successfully fix our beliefs emphasizes the ways in which tools, techniques, measurements, and so on insinuate themselves into inquirential processes and are able to influence both their character and their outcomes. A year before his philosophy club lecture, he had written that experiment is "indispensable to the institution of knowledge or truth" and he urged that theories be subjected to the widest possible peer review. (MW.8.82)

II.

Dewey's emphasis on experiment as central to the attainment of warranted assertibility, or what amounts to the same thing, *his identification of inquiry as a general form of technology*, stands in stark contrast with some newer versions of pragmatism that advance deflationary accounts of both truth and the function of philosophy. More specifically, it seems that the accounts of discourse, conversations, re-descriptions, and consultations that hold pride of place within some newer varieties of Pragmatism are much less robust than the technological account of inquiry advanced by Dewey.

This is not to say that such activities – discourse, conversations, consultations, and the like – do not play an important role as *elements* or *aspects* or *phases* within processes of inquiry. The point that Dewey seems to want to drive home, however, is just that they do not *exhaust* what he means by inquiry. The problem is that it is possible to discourse, converse, debate, consult, re-describe, and so on interminably – but still not reach significant results in the absence of an experimental context. Inquiry, in the honorific sense in which Dewey employs the term, is able to resolve doubtful situations precisely because it is the systematic invention, development and cognitive deployment of tools, brought to bear on raw materials and available stock parts, with a view to producing resolutions of those experienced difficulties. Inquiry is thus a more comprehensive activity than discourse, conversation, re-description, and so on, since those are

activities which may or may not contribute to an experimental process in which a conclusive outcome is sought.

My point, therefore, is that Dewey's technological metaphors run much deeper than has generally been recognized by some of the neopragmatists who have claimed Dewey's *imprimatur*. Indeed, Dewey's *identification* of technology with intelligent inquiry employed the term "technology" in its etymologically pristine sense, namely, as the study of or inquiry into tools and techniques. It was precisely for this reason that he was able to make the claim, which would otherwise have appeared absurd, that "'Technology' signifies all the intelligent techniques by which the energies and nature and man are directed and used in satisfaction of human needs; it cannot be limited to a few outer and comparatively mechanical forms. In the face of its possibilities, the traditional conception of experience is obsolete." (LW.5.270)

Now it might be asked at this point how this "technological" account of logical objects is related to the central tenets of classical Pragmatism. The core elements of classical Pragmatism, as we know, include (but are not exhausted by): first, a theory of *meaning*, according to which the entire meaning of a concept lies in its conceivable practical effects; second, a theory of *truth* as satisfaction of objective conditions, or, as Dewey put it, warranted assertibility; and third, a theory of *inquiry* in which ends and means transact business with a view to adjustment of organism and environment.

Dewey drew a sharp distinction between inquiries that are *experimental* and inquiries that are merely *empirical*. He characterized Aristotle's naturalism, for example, as *empirical* in the sense that it involved a type of proto-science that was based for the most part on observations and inferences therefrom. It was not experimental, however, because it did not involve the use of tools and other artifacts in controlled and systematic ways – ways that insinuated those tools and artifacts into the mix of an inquirential situation, thus altering the ratio of means and ends. It was not until the technical and technological advances that began during the seventeenth century, of course, that there came to be a truly experimental science, that is, a science that attempted to be instrumental in the sense I just described, even to the point of inventing and developing new tools and artifacts such as the air pump and the telescope for the purposes of specific inquiries. The new science was, for the first time, a systematically instrumentalized project, in other words,

a technoscience.

It bears repeating that it is this commitment to experimentalism, embedded in his instrumentalism, that tends to distinguish Dewey's classical version of Pragmatism from many of the programs and outlooks that now go by that name.

Dewey's technological metaphors are quite different, for example, from the new "literary" Pragmatisms whose primary concern seems to center on the exploration of "alterity" and the place and function of the trope. Some self-described Pragmatists of this school have even denied that philosophy still has a legitimate function within human experience.

One neopragmatist has written, for example, that "philosophy doesn't matter and that when faced with a crisis or choice or decision you and I will typically have recourse to many things – archives, consultations with experts, consultations with friends, consultations with psychiatrists, consultations with horoscopes – but one of the things we will not typically consult (and if we did it wouldn't do us any good) is some philosophical position we happen to espouse." (Fish, 2003, p. 389)

Dewey's classic version of Pragmatism, of course, took an entirely different route. He was clear enough on this matter especially in the final chapter of *Experience and Nature* where he characterized philosophy as a criticism of criticism by means of which we are able to divest ourselves of old ideas and habits that have become counterproductive and produce new habits of action.

There can be little doubt that the neopragmatist I just cited has it right when he argues that much of what passes for philosophical discussion fails to pass the Pragmatic test. But it is a considerable leap from that claim to his conclusion that philosophers should probably join the unemployment lines rather than joining the front lines of the fight against the problems of men and women, including the bad metaphysics that has entered into and come to have effects within the public domain. The contrast is stark: whereas this neopragmatist seems to take delight in telling us that philosophy "doesn't matter," Dewey was famous for telling us that the philosopher's work is never quite finished.

III.

There is also the matter of the deflationary accounts of truth that are popular among some of the proponents of the newer versions of Pragmatism. In this regard it seems worth noting that one of the central features of Dewey's experimentalism was his commitment to the notion of truth as warranted assertibility.

As William James reminded us, it can scarcely be doubted that most of our beliefs rest on some sort of trust in the testimony of others – testimony, to be sure, that comes to us through discourse, conversations, consultations, and redescriptions. Most of us do in fact consult with physicians and automobile mechanics about matters beyond our expertise. But as James told a *New York Times* reporter in 1907, "Pragmatism's primary interest is in its doctrine of truth." He followed that remark with one that was patently technological: "Our minds are not here simply to copy a reality that is already complete. They are here to complete it, to add to his importance by their own *remodeling* of it, to decant its contents over, so to speak, into a more significant *shape*. In point of fact, the *use* of most of our thinking is to help us to *change* the world." (Quoted in McDermott, 1967, p. 448). Italics added). It would be hard to find a better statement of the intimate link between the instrumentalism of the founding Pragmatists and their theory of truth.[3]

Another way of putting this difference between the classic versions of Pragmatism and some of its newer varieties is that Peirce, James, and Dewey took the successes of the technosciences quite seriously as models for philosophical inquiry. It is not that they thought the literary arts, for example, inferior to the technosciences, but just that the technosciences, because their subject matter is less complex than that of the social sciences, the humanities, or the arts, has been more effective in providing models of successfully concluded inquiry.

By contrast, some of the newer versions of pragmatism have privileged the literary and rhetorical arts to the extent that they appear to have just inverted the old logical positivist model – a model that privileged the physical sciences and marginalized poetry and religion, for example, as simply outside of the field of play. In some of the newer forms of Pragmatism the literary and rhetorical arts have become so dominant that interest in the methods of the

[3] There can be no doubt of James' commitment to an instrumentalist account of truth. The term "remodel" and its cognates, for example, appear in his work dozens of times.

technosciences seems just to have just disappeared off the edge of the playing field, with the consequence that the classical Pragmatist's concern with warrant, validation, verification, reconstruction, and so on, has been replaced with talk of conversation, discourse, consultation and redescription.

Whether or not one is inclined to accept these deflationary accounts, it must at the very least be admitted that they have very little in common with Dewey's more robust, experimentalist brand of pragmatism.

But there is more. Even if one *were* to admit that the new deflationary accounts had little in common with classical Pragmatism and accept the newer versions as marking progress over the doctrines of the founders, this situation would still be problematic: some of the critics of deflationary accounts of truth, for example, have begun to *identify* such accounts as Pragmatism *simpliciter*.

Bernard Williams's complaints in his book *Truth and Truthfulness* about the views of Richard Rorty, for example, exhibit precisely this move. Here is Williams: "But the pragmatists' argument is . . . supposed to show quite generally, for any proposition or belief whatsoever, that we cannot distinguish between its being true and our accepting or agreeing on it, and this will apply as much to the plainest and simplest truths as it does to anything else." (Williams, 2002, p. 129) Note the contrast between this account and that of Dewey, who wrote with approval of James' position on the matter: "His real doctrine is that a belief is true when it satisfies both personal needs and the requirements of objective things." (MW.4.112)

In this, Williams seemed to somehow misplace the fact that the originating Pragmatists, in this case James and Dewey, were not truth deflationists. As Dewey put the matter in an unpublished manuscript presented to R. M. Chisholm in 1945, "If I were to say that I no longer regard the truth-problem as important I should certainly seem to justify some of the worst things which have been said about me."[4]

IV.

[4] John Dewey. Unpublished typescript, 5 pp., R. M. Chisholm, Private Collection.

Contrary to the claims of some neopragmatists, if we accept the core doctrines of classical pragmatism – its theories of meaning, truth, and inquiry – then we would expect those doctrines to make a difference wherever they were appropriated and acted upon. If Dewey's Pragmatism features a rigorous a critique of our technological culture, as I have elsewhere argued that it does, then we might expect his ideas to have far-reaching consequences with respect to the ways in which we interact with our tools and techniques. What would be some of those consequences?

For one thing, we would have to give up the idea, so earnestly and eloquently advanced by members of the first generation of the Frankfurt School and others, that technology is somehow "the problem." I freely admit that there may have been some justification for the profound technophobic fixation of many philosophers from the 1930s to the 1960s and beyond. That was after all a time of hot and cold wars, massive displacement of human populations as the result of the misuse of tools and techniques, and the perpetuation of severe imbalances between ends and means on a scale that in retrospect can only be termed global. Put in terms of Dewey's metaphor, however, it now seems clear that the extreme critics of "technology" – the first generation of the Frankfurt School, Jacques Ellul, Hans Jonas, and others – tended to confuse technology with badly selected and utilized tools and techniques.

There are two points worth noting in this regard. First, among the new generation of critical theorists there are those who have been able to move beyond this confusion and consequently to construct a new and more productive account of technology. This is perhaps most notable in the work of Andrew Feenberg. Elsewhere, I have argued in considerable detail that Feenberg's position on these matters is now probably closer in spirit to the work of Dewey than even to Feenberg's own teacher Marcuse. (Hickman, 2001, 71-81)

Second, it should be recalled that Dewey himself, precisely because he distinguished technology from tools and techniques, never succumbed to this technophobic assessment that was so widespread among his contemporaries. Even though Dewey lived through some of the worst days of the exploitation of labor and the Great Depression in the United States, the rise of Fascism and Stalinism in Europe, and the beginnings of the Cold War, he never deviated from his identification of technology with the use of intelligence. And he never abandoned his view that it is only by means of technology that human beings can analyze and reconstruct tools and

techniques that have become inappropriate or dangerous, and this with a view to the experimental analysis and securing of goods.

Simply put, for Dewey it was never "technology" that was the problem. It was always faulty tools and techniques, or intransigence in the face of new ideas and methods, or overriding class and economic interests, or failure either through ignorance or through force of will to avail oneself of the best of tools at ones disposal, or combinations of these and myriad other factors that are so easily and frequently arrayed against efforts to promote human growth and flourishing. For Dewey, technology – as the experimental involvement with our tools, techniques, traditions, and so on – is intelligent. It is therefore the antithesis of ignorance, greed, intransigence, and ideology.

V.

But if Dewey thought that technology is intelligent, that technology holds the promise of better and more productive individuals and societies, how can this come about? How would Dewey's program be carried out?

First, if we take care to distinguish technology from tools and techniques, then we would consequently have to recognize that the transfer of tools and techniques is not the same as the transfer of technology. If technology is reflective or critical inquiry into tools and techniques, and if reflective or critical inquiry is context-bound as the founding pragmatists argued, then technology is context-bound. Technology can no more be transferred than democracy can be exported, and for many of the same reasons.

This situation is perhaps nowhere more evident than in the case of food production in developing countries. The transfer of the tools and techniques related to "transgenic" crops, for example, has led to higher yields in large scale production systems with decreased input of material and labor costs. But many or most of these efforts have been advanced by large corporations with a view to the *export* of agricultural products *from* developing countries. Scant attention has in fact been given to crops that provide "staple foods" for local populations.

According to a position paper written by Louise O. Fresco, published by the Food and

Agriculture Organization (FAO) of the United Nations[5], this has led to a "molecular divide" between developed and developing countries, and, as Fresco puts it, a divide "between technology development and technology transfer."

If we look beyond terminological differences, it becomes apparent that Fresco is distinguishing technology from tools and techniques in much the same manner that Dewey proposed. She suggests that there needs to be a new contract among all interested parties that would be based on three principles: open dialogue on biotechnology's benefits and risks, increased public and private research to respond to key challenges, and new methods of insuring equitable benefit-sharing of new tools and techniques.

Returning to the theme of truth as warranted assertibility, Fresco thus proposes an experimental program *within which* conversations, consultations, and redescriptions will be *contributing components* and whose outcome will be concrete results, including the ability of developing countries "to establish a capacity to assess and manage all aspects of risk throughout their food chain." In other words, the transfer of tools and techniques in the absence of technology (read inquiry into their conceivable practical consequences) has created a situation that is at best undesirable and at worst quite dangerous. Moreover, the truth of her proposal will be determined not by conversation, consultation, and re-description alone, but by the extent to which it becomes *warranted* by experimental means and the degree to which it is consequently *assertible* within present and future problematic contexts.

The significant difference between the transfer of tools and techniques and the transfer of technology can be further illustrated by the now classic case of pesticide export from the United States to developing countries. A 1998 report[6] indicated that between 1992 and 1996 "U. S. exports of restricted and severely restricted pesticides rose 33 percent." Further, "of those [exported products], six pesticides considered 'extremely hazardous' by the World Health

[5] The Food and Agriculture Organization of the United Nations was founded in 1945 with a mandate to raise levels of nutrition and standards of living, to improve agricultural productivity, and to better the condition of rural populations. See Fresco (2003).

[6] Larsen (1998). See also Weir and Schapiro (1981). For an update, see Wright (1986, pp. 26-59).

Organization skyrocketed more than 800 percent. Reported exports of pesticides banned in the U. S. remained steady [during this period], averaging around 6 million pounds a year." At issue in this case is the export of tools and techniques into contexts in which little or no technology existed that could provide a basis for their safe use.

This situation was of course not without consequences to consumers in the United States and other developed countries, presumably including Finland, which imported foodstuffs, including various fruits and coffee beans, that had been treated with these pesticides. In this case, the experimental results were in: it was assertible with warrant that the pesticides had already been tested and declared "extremely hazardous" prior to their being "dumped" in developing countries. The next step would be to find ways of limiting their export and use.

Although there is much more to be said regarding these issues, I will limit my remarks to just one more example of what I take to be the applicability of Dewey's Pragmatist program, of which a central component is his notion of warranted assertibility, to the problems that we now face as inhabitants of the 21st century. In a different venue I have argued that Dewey's experimental version of Pragmatism offers certain advantages over some of its alternatives in terms of the development of what has been termed "global publics" and "global citizenship." My argument in brief was that Pragmatism provides tools for the formation of global publics that are available neither to fundamentalists, on the one side, nor post-modern cognitive relativists, on the other. From the standpoint of classical Pragmatism, the former position claims too much, and the latter offers too little.

If Dewey was correct, then global citizenship will probably transcend the traditional functions of nation-states interacting with one another, as well as the citizens of nation-states interacting with one another through their respective national governments. It will likely involve new trans-national, trans-ethnic, trans-religious publics dealing directly with one another on the basis of shared interests and goals. It is also likely that these new publics will "leapfrog" currently existing political structures by means of the new communications tools and techniques, and that they will consequently work in some of the ways that non-governmental organizations (NGO's) and certain ad-hoc groups now function. Given Dewey's premise that publics are technical products that arise as a result of felt needs and shared interests, and his observation that

the crucial issue in political life may not be so much the conflicts between individual and society or even between individuals but between various publics, it will be imperative for the processes of global citizenship that there be means for the successful resolution of such conflicts.

What Dewey's experimental Pragmatism offers, first, is an alternative to the various types of fundamentalism that promise the "objectivity" of absolute certainty. This is because the type of objectivity provided by warranted assertibility is a type of objectivity that is both grounded in a community of inquiry in which instruments enter into systematic and controlled experimentation and also self-correcting as a result of its commitment to fallibilism. Fundamentalisms, on the other hand, such as Christian, Muslim, and Native American, tend to rely in the first instance almost exclusively on authority (in these cases, divine revelation, textual literalism, and oral tradition, respectively). When their judgments are challenged, it becomes apparent that they have no mechanism for advancing their agenda short of appeals to authority or the application of psychological, physical, or political power. As Dewey argued, when it comes to resolving conflicts between publics, the tools of the fundamentalists have proven to be inefficient at best or counterproductive and dangerous, at worst.

At the other extreme are the so-called post-modern cognitive relativists who claim that the notions of truth and objectivity are muddled and outmoded concepts and that, as Stanley Fish has put it, that "there can be no independent standard for determining which of many rival interpretations of an event is the true one." (Fish, 2001, p. A23) Replying to Fish in the spirit of Dewey's experimental pragmatism, Howard Gardner has pointed out that "universal standards emerge as necessary for . . .discourse." (Gardner, 2001, p. 14) I would just add to this that for Dewey, norms or standards arise as byproducts of practice and they are universal – not in the sense that they have been universalized, but in the sense that they are universal*izable* until they are successfully challenged.

That such norms have not been universaliz*ed* was a fact that in his view constituted not so much a problem for a robust theory of truth and objectivity as an incentive for further effort. The list of universaliz*able* norms, which is to say objective judgments, is a long one that includes prohibitions against such practices as slavery, female genital mutilation as it is still practiced in certain parts of sub-Saharan Africa, ethnic cleansing, and so on. On the positive side, there are

universaliz*able* norms enshrined in the "Universal Declaration of Human Rights" of the United Nations and in the constitutions of liberal democracies.

In Dewey's view, norms such as these have arisen experimentally as byproducts of human practices. They increase in number as a result of technological advances, and they offer the basis for adjudicating conflicts between and among global publics.

VI.

Finally, I am compelled to emphasize what I am convinced is at stake here. It is a familiar and often-repeated refrain that Pragmatists must not continue to chew over the texts of Peirce, James, Dewey, and Mead while there are real world issues that demand attention. But it is precisely renewed attention to those familiar – and not so familiar– texts that furnish the grounds for reclaiming the experimentalism of classical Pragmatism as a defense against the assaults on science and public health that are currently being waged by the Bush administration and others. To take just one example, a 2004 report by the Union of Concerned Scientists, signed by 62 leading scientists, detailed case after case in which the current administration had allowed ideology to trump good science and good public policy. As I write, in 2008, the number of signatories of has swelled to more than 15,000. The list includes 52 Nobel laureates, 63 National Medal of Science recipients, and 195 members of the National Academies.[7] The President's science advisor has dismissed the authors of the report as "conspiracy theorists."[8]

The current corruption of science by government and industry and the corruption of the process of peer review by universities and corporations is in my view unprecedented in modern times, and this situation will not be addressed by those for whom science is a kind of literature, or those for whom such assaults on the public good amount to little more than yet another conversation, or yet another redescription. If we abandon the experimentalism of the classical Pragmatists, if we accept the currently fashionable deflationism, then I submit that we will have stripped ourselves of the tools with which to confront the forces that are currently arrayed against good science and good public health policy.

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[7] See Union of Concerned Scientists, <http://go.ucsusa.org/RSI_list/index.php>. Retrieved 04.09.08.

[8] (New York Times, 2004)

In this brief essay I have attempted to demonstrate Dewey's use of technical and technological metaphors, and his rejection of truth deflationism, to resolve certain traditional philosophical problems. I have also suggested some specific ways in which his contributions to a critique of our technological culture can lead to advances in human well-being and foster global publics and global citizenship. In all this I have argued that the program advanced by the classical Pragmatists continues to be applicable to the problems of the twenty-first century – perhaps now more than ever.

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