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## **Classical Pragmatism and its Varieties: On a Pluriform Metatheoretical Perspective for Knowledge Organization**

### **Abstract**

Pragmatism is a metatheoretical perspective within knowledge organization (KO) deriving from an American philosophical tradition active since the late 19<sup>th</sup> century. Its core feature is commitment to the evaluation of the adequacy of concepts and beliefs through the empirical test of practice: this entails epistemological antifoundationalism, fallibilism, contingency, social embeddedness, and pluralism. This article reviews three variants of Pragmatism historically influential in philosophy—Pierce’s scientifically oriented pragmatism, James’s subjectivist practicalism; and Dewey’s socially-directed instrumentalism—and indicates points of contact with KO theories propounded by Bliss, Shera, and Hjørland. KO applications of classical Pragmatism have tended to converge toward a socially pluralist model characteristic of Dewey. Recently, Rorty’s epistemologically radical brand of Neopragmatism has found adherents within KO: whether it provides a more advantageous metatheoretical framework than classical Pragmatism remains to be seen.

### **Introduction**

In recent years, researchers within library and information science (LIS) have increasingly come to reflect on the field’s metatheories—i.e., the sets of general philosophical assumptions underlying individual theories and practices—in the hope of identifying perspectives especially fruitful for guiding research and practice within the field (e.g., Hjørland 1998, Bates 2005). The LIS subfield of knowledge organization (KO), in particular, has witnessed a vigorous debate concerning metatheoretical issues, centering on the different epistemological positions informing the design of knowledge organization systems (KOSs) (e.g., Hjørland 2003, 105–107; Smiraglia 2002; Tennis 2008, 103–104). One metatheoretical perspective that has received considerable attention among KO researchers is Pragmatism (e.g., Gallagher 1991, Jacob 2000, Hjørland 2005– ), a philosophical tradition that originated in the United States in the late 19<sup>th</sup> century, enjoyed its heyday from the 1890s to the 1940s, and, after a period of neglect, has undergone a notable revival in a number of humanistic and social-scientific fields from the early 1980s to the present (Dickstein 1999). In light of its origins, philosophical Pragmatism can be considered to constitute a North American contribution to the metatheory of KO, albeit one whose current vogue within the field owes much to impulses from Scandinavian scholarship (e.g., Hjørland 1997; Thellefsen & Thellefsen 2004).

The core defining feature of Pragmatism is the epistemological tenet that the meaning of a concept or the truth of a statement is to be evaluated with reference to “the experiential or practical consequences of its application” (Haack 2003, 774). Pragmatists seek to establish knowledge claims with reference to human action in, and experience of, the ambient world—that is to say, to determine which beliefs count as knowledge by considering how they work when put to the empirical test of practice. To put a concept or belief to the test is

to inquire about its adequacy in the light of experience. Now the pragmatic test does not occur in an epistemic vacuum, for each belief forms part of a nexus of beliefs. Nor are these beliefs neutral: as a matter of course, they “guide [one’s] desires and shape [one’s] actions” (Peirce 1955, 9–10)—i.e., they betoken interests, goals, and values that inform one’s experiences and guide one’s judgment in assessing the adequacy of other beliefs. Such interests, goals, and values are not purely individual but shared within a larger social framework and so the pragmatic testing of beliefs has a social dimension. Those beliefs that are found to be adequate become part of what counts as knowledge within one’s social framework—at least until new experiences supervene that might call them into question and so require that they be put to the test again. In short, Pragmatism is antifoundationalist (i.e., it claims no absolute epistemic certainty *vis-à-vis* the validity of any single concept or belief), fallibilist (i.e., concepts and beliefs are always open to challenge, revision, and improvement), contingent (i.e., any new experience can trigger revision of one’s concepts and beliefs), socially embedded (i.e., all knowledge claims are evaluated within the framework of a community of inquirers), and pluralist (i.e., different individuals and (sub)communities within a single social framework may hold differing knowledge claims with respect to a given phenomenon) (Jacob 2000).

Within the literature of KO, Pragmatism is typically presented as a unitary philosophical approach (e.g., Hjørland 1997, 75–76; 2008, 97–98; Jacob 2000). Such a mode of presentation undoubtedly has the advantage of providing a compendious characterization of Pragmatism *qua* metatheoretical position. However, it leaves out of account the fact that, historically, Pragmatism has been marked by a wide variety of perspectives—so much so that one early adherent of the movement claimed that “there are as many pragmatisms as pragmatists” (F. C. S. Schiller, quoted in Haack 2003, 775). Pragmatism, then, is an inherently pluriform metatheory, different versions of which emphasize different aspects of, and constraints upon, the core epistemological doctrine outlined above. Given the polyphonic nature of Pragmatism, a full appreciation of its implications for KO requires that one take note of its chief varieties and their points of difference. In this paper, I shall present brief sketches of the three most influential classical formulations of Pragmatism, expounded by the North American philosophers Charles Sanders Peirce (1839–1914), William James (1842–1910), and John Dewey (1859–1952). In each case, I shall point out some basic features that distinguish it from the others and indicate some points of contact that it has with KO theory.<sup>1</sup> In closing, I shall note current trends in the interpretation of Pragmatism within KO, such as the growing acceptance of the postmodernist form of Neopragmatism expounded by Richard Rorty (1931–2007).

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<sup>1</sup> Constraints of space do not permit a full exposition of Peirce’s, James’s, and Dewey’s doctrines nor is there room to consider the ways in which these three philosophers developed, revised, and refined their respective versions of Pragmatism over the courses of their careers. For fuller introductions to their thought, as well as to that of other Pragmatist philosophers not discussed in this paper, see Murphy 1990. De Waal 2005. A useful online resource for further exploration of the historical background and philosophical lineaments of Pragmatism is the *Pragmatism Cybrary* (<http://www.pragmatism.org>; accessed June 7, 2009).

### **Peircean Pragmatism: Towards a convergence of reality and scientific consensus**

Trained as a mathematician and physical scientist, Charles Sanders Peirce (1955, 2) took the methods of physical science as a model for developing his philosophical position. In his view, the beliefs we hold about the world are habits of mind formed on the basis of our experience and regulating our actions *vis-à-vis* the world (p. 10). Typically, we tend to persist in our beliefs without further ado: however, experiences that challenge them may throw us into a state of doubt, which Peirce characterized as “an uneasy and dissatisfied state” of mind (p. 10). Once thrown into this disagreeable state, the mind seeks to return to the equilibrium of belief by resolving the doubt afflicting it (p. 26)—a process that Peirce called “inquiry” (p. 10). A necessary condition for obtaining a satisfactory result to inquiry is the use of a correct method. This method, in Peirce’s opinion, is “the method of science”, whose cardinal feature is that through it, “our beliefs may be determined by nothing human, but by some external permanency—by something upon which our thinking has no effect” (p. 18). Through a three-step process of abduction (i.e., hypothesis formation), deduction, and induction, Peirce argued, an inquirer can formulate a belief as a hypothesis and establish its truth not through empirical verification, but rather through lack of empirical falsification (Lachs 1999, 79; Copleston 1994, 306). Although truths, or knowledge claims, generated in this way are probabilistic in nature and open to dispute by different investigators, Peirce believed that, if inquiry were carried out over an indefinitely long period of time within an ideal community of rational inquirers committed to the methods of science, the opinions of all these inquirers would converge towards a consensus as to what constitutes truth, which, in turn, would be consonant with the external realities that form the objects of human experience and belief (Lachs 1999, 77, 82–83).

Peirce’s belief that the results of inquiry, though provisional in the short term, are apt to lead to convergence between scientific opinion and external reality over the long term, aligns his brand of pragmatism with scientific, or critical, realism (Heelan & Schulkin 1998, 172). In this regard, it finds an interesting analogue in the KO theory of Henry E. Bliss. Now Bliss espoused a form of critical realism founded on a doctrinal basis quite different from that of Peirce and does not seem to have had direct acquaintance with Peirce’s work (Bliss 1929, 127–131, 170–173). Nevertheless, the points of contact between his and Peirce’s views are striking and merit scrutiny. Bliss took the methods and results of the natural sciences as touchstones for knowledge towards which other fields of knowledge were to tend (pp. 189–198, 240–252), posited the existence of a unitary “scientific and educational consensus” derived from the results of scientific investigation (pp. 16, 300–301), and held that the classification of sciences that he had developed on the basis of his understanding of this consensus was consonant with “the order of nature” (pp. 219–222; cf. Richardson 1901). Bliss and Peirce thus both envisioned that the body of scientific beliefs ratified by scientific consensus could offer a true account of the way the external world really is—a view born of a shared confidence in the efficacy of scientific method. Of course, one should add that Peirce and Bliss differed significantly as to their views of the temporal situation of this convergence: the former envisaged it as occurring far in the indefinite future (and possibly not at all) (Rescher 2000, 13–14), whereas the latter deemed

it as already existent and, indeed, claimed that it was reflected in the classification that he was elaborating (Bliss 1929, 299–304). Nevertheless, the basic parallel between Peirce’s and Bliss’s views regarding the nexus between scientific consensus and external reality indicates the degree to which Peirce’s pragmatism was informed by objective and realist presuppositions.

### **Jamesian Practicalism: The importance of purpose**

In contrast to Peirce’s austere, objectivist version of Pragmatism, William James developed a subjectivist one applicable to problems of life well beyond scientific inquiry. In his view, the pragmatic test was not, as for Peirce, largely restricted to clarifying our scientific understanding of the external world, but rather a way of generating beliefs that would prove practically beneficial for the individual holding them (Haack 2003, 779). James held that both human knowledge of, and activity in, the world are informed by the interests and purposes that different people bring to their encounter with their environment (McDermott 1977, xxxviii–xli; Stuhr 1999). These interests and purposes lead individuals to determine how they make sense of the objects of their experience, a view that leads to what may be termed “relativistic essentialism”: as James (1927, II, 333, 335) put it: “*there is no property ABSOLUTELY essential to any one thing ... The essence of a thing is that one of its properties which is so important for my interests that in comparison with it I may neglect the rest*”. On this account, one’s conception of a thing is true insofar as it proves satisfactory to believe in the light of one’s purposeful interaction with that thing in concrete situations: in James’ (1977, 447) pregnant formulation, “*mind engenders truth upon reality*”. This does not mean that one can assert a belief solely on the basis of the practical utility that flows from its use as a justification for action: it must also be assimilable to one’s other beliefs and, moreover, must not prove recalcitrant to one’s experience of reality (pp. 430, 434–435, 438, 448). Nevertheless, the efficacy of beliefs for practically coping with reality is a major theme for James, while the diversity of individual interests and purposes in different life situations ensures that Jamesian Pragmatism tends to take a robustly pluralist stance regarding truth and, for that matter, reality (Stuhr 1999).

James’s subjective version of Pragmatism has sensibly influenced KO discourse about classification, as is apparent in the writings of Jesse Shera. Explicitly invoking James as his source, Shera (1965, 90–91) held that our conceptions of objects and their interrelations are conditioned by the purposes to which we want to put them, fully endorsing the argument that “[n]o one conception invariably represents its reality independent of a particular purpose”. Furthermore, he agreed with James that “[t]he pattern of organization, the classification of experience, differs from individual to individual; admitting, of course, that there are certain basic patterns, classifications, that are familiar to all” (p. 119). Given the variation among individuals with regard to interest and person, Shera argued that classifications must be flexible and that such flexibility “will be achieved by providing *multiple approaches*” to the concepts being related (p. 91). Jamesian Pragmatism thus provided potent support for Shera’s call for the creation of “multi-dimensional” classifications capable of accommodating multiple perspectives, an ideal that has continued

to inform KO theory to this day. It also undergirds, in part, Shera's argument that special classifications intended for specific communities should seek to capture those properties of the concepts being classified that were relevant to the habits of use of those communities (p. 91). In his concern for communities, however, Shera went beyond the Jamesian perspective and approached a Deweyan one.

### **Deweyan Instrumentalism: Inquiry as social action**

John Dewey's version of Pragmatism sought to strike a balance between Peirce's scientific orientation and James's more practically motivated one. Following Peirce's lead, Dewey developed a theory of inquiry as a form of problem solving involving experimentation. On his account, a person faced with a problematic, or "indeterminate" state of affairs must apply thought to analyzing the underlying problem, formulate a course of action based on this analysis, and take concrete steps to alter the state of affairs according to his purpose: in this way, the original problem is transformed into a "determinate situation", wherein the person co-exists in a new, improved equilibrium with his or her environment, having acquired new knowledge in the process (Dewey 1981, 226). Dewey did not, however, restrict his method of inquiry primarily to strictly scientific matters as Peirce had done; rather, he viewed it as a means of solving more general human problems. Much like James, Dewey subscribed to a form of "objective relativism" regarding knowledge, holding that one's conceptions of things in the world are colored by one's experiential background, interests, and purposes, and actively shaped by one's interactions with those things (Hickman 1998, 104–106). Likewise, he agreed with James that concepts and beliefs are tools, which, when applied to our experience in the world, are capable of generating new knowledge (Dewey 1981, 234–235; James 1977, 380) and that knowledge acquisition is an inherently creative act, since it is always actively engaged in altering the world in some way to further human ends (Čapek 1990, 33). However, unlike James, Dewey stressed the social dimensions of Pragmatic method, situating inquiry within the framework of community life (Hickman 1999). Dewey's conception of community was not abstract and universal like Peirce's ideal community of rational scientific inquirers, but rather encompassed the rich variety of communities that make up society *hic et nunc* (Campbell 1998; Horwitz 1972, 812–813). Such communities, in Dewey's view, provided the pluralist underpinning for democratic life and their interactions served as the field for bringing about "positive and constructive changes in social arrangements" (Dewey, quoted in Rescher 2000, 27, n. 41). In short, Dewey developed Pragmatism into a fully social—and socially engaged—philosophy.

Dewey's thought has had a deep impact on the Pragmatist perspective for KO developed by Birger Hjørland (1997; 2003, 105–107; 2008, 97–98) within his domain-analytic framework. To be sure, not all the elements in Hjørland's version of Pragmatism are specifically Deweyan: for example, his characterization of the Pragmatist approach to classification as one requiring "an analysis of goals, values, and consequences" (Hjørland 2003, 105) could just as easily invoke James, while his affirmation of "scientific realism" as a philosophical position in LIS (Hjørland 2004) would find more unequivocal support in

Peirce. Nevertheless, key planks in Hjørland's thought bear an unmistakably Deweyan stamp. For example, Dewey's account of inquiry provides the metatheoretical basis for Hjørland's (1997, 168–169, 82) views on “the ecological and social nature of meaning”, as well as for his understanding of the nature of “pragmatical realism” (i.e., “objective relativism”, as defined above). Likewise, the domain-analytic idea that the universe of knowledge consists of different domains correlated to different epistemic communities and that special classifications should be devised to serve those communities is consonant with Dewey's acknowledgement of pluralism as a social given. Finally, Hjørland's (2005– ; 2003, 105) claims that “[t]he pragmatic view of knowledge is of special importance to ... LIS ... because it is connected to the social role of LIS institutions ... serving democracy and enlightenment” and that “[p]ragmatic classification” may be regarded as “critical or political classification” well reflect Dewey's own acceptance of pluralism and engaged commitment to social meliorism within a democratic form of life.

### **Concluding Remarks: Whither Pragmatism in KO?**

As we have seen, Peircean pragmatism, Jamesian practicalism, and Deweyan instrumentalism constitute three classical forms of Pragmatism, differing in their respective views of the scope of application of the Pragmatic method, the level of communal association at which it is most efficacious, the degree to which human knowledge is objective *vis-à-vis* external realities, and the nature of the truth claims arising from human experience of the world. Within KO, researchers adopting Pragmatist perspectives have tended to incline towards the socially pluralist model articulated by Dewey and championed by Hjørland: even those who explicitly invoke Jamesian (Shera 1965) or Peircean (Thellefsen 2004; Thellefsen & Thellefsen 2004) theories and methods deem the (limited) knowledge domain as the most appropriate level toward which to orient KOSs. Such a tendency perhaps represents the confluence of certain KO traditions—cf. the production of special classifications, indexes, and subject bibliographies geared towards particular user communities—with a postmodern *Zeitgeist* that eschews the modernist epistemological program of cognitively “mirroring” the phenomena of the world in favor of understanding knowledge as a human construction and rejects notions of an absolute Truth in favor of valorizing multiple perspectives on what counts as knowledge (Miksa 1998, 84–87, Jacob 2000). Such a setting is, in many respects, congenial to a Deweyan outlook (Hickman 2007, 16–18, 29).

The postmodern spirit, however, has encouraged, within both philosophical Pragmatism and its KO derivatives, approaches that go well beyond the classical Pragmatist idea of “objective relativism” as an epistemological norm (Hickman 2007, 18–26). This tendency has found its most visible form in the Neopragmatist viewpoint propounded by Richard Rorty. While Rorty accepts many elements of classical Pragmatism, such as its antifoundationalism, fallibilism, pluralism, and repudiation of the notion of knowledge as a neutral representation of the external world, he differs from it in two significant respects: (1) he views “language” rather than “experience” as constitutive of knowledge and (2) he rejects the notion that any method—especially scientific method—can serve as a privileged

means for justifying individual and community beliefs (Rorty 1999, 35–36). For Rorty (1982, 165), “[t]here are no constraints on inquiry save conversational ones—no wholesale constraints derived from the nature of the objects, or of the mind, or of language but only those retail constraints provided by the remarks of our fellow-inquirers”. Inquiry thus becomes “a matter of continually reweaving a web of beliefs rather than the application of criteria to cases” (Rorty 1987, 44). Such an epistemological stance leads from Deweyan “objective relativism” grounded in human experience to an ungrounded “antirealist” relativism that views knowledge claims purely as the result of a language game with no cross-community standards for evaluating competing claims. The radical antiessentialism of Rorty’s Neopragmatism has increasingly found adherents within LIS in general (Sundin & Johannisson 2005) and KO in particular (Tennis 2007, 2008; Tennis & Sutton 2008): whether it offers greater metatheoretical “cash value” than the forms of classical Pragmatism reviewed here is an open question deserving further discussion within the KO community.

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