

Dewey and “the Greeks:” Inquiry and the Organic Spirit of Greek Philosophy

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While John Dewey’s notion of inquiry is readily considered against thinkers like C. S. Peirce (Prawat, 1999), Hegel (Shook, 2000), and Immanuel Kant (Johnston, 2006a), there have been few who have attempted to trace the Greek contours of his position. This is noteworthy, however, since:

More than one critic ... has remarked that most of [his] significant commentary on ancient philosophy occurs within argument for some special phase of his own theory of inquiry. The indication ... is that, in Dewey’s eyes, the study of Greek philosophy should not be thought of primarily as the occupation of a special academic task force, but as a continuing reinterpretation that is of general importance within contemporary philosophy. (Anderson, 1967, p. 86)

Those who *have* considered the connection between Dewey’s theory of inquiry and Greek thought have mostly situated their remarks within larger points, regarding either teaching and learning (Garrison, 1997; Johnston, 2006b; Cahn, 2007) or aesthetics and craft (Alexander, 1987; Hickman, 1990). The fact that this area remains somewhat underexplored could be chalked up to several factors: 1) Dewey was often quite critical of the classical tradition, particularly when it came to theories of knowledge; 2) Dewey was not a trained classicist, with little working knowledge of ancient Greek, and was self-admittedly *not* a historian of philosophy; and 3) whenever Dewey *did* turn positive attention toward ancient thought, he tended to speak in generalities, referring most often to “the Greeks” rather than any particular Greek thinker. In spite of this, there remain many compelling reasons to place Dewey’s views on inquiry in meaningful dialogue with the classical tradition. I will suggest that the most compelling of all is the link between Dewey’s view of inquiry and his particular brand of naturalism, which found its fullest expression late

in his career. This is an underappreciated connection in Dewey's work on inquiry, either taking a backseat to the instrumental, experimental themes in his thought or misinterpreted as a form of positivism/scientism. Once acknowledged, however, this connection could help bring Dewey's normative, socio-political writings in line with his theories on ontology, logic, and the acquisition of knowledge.

Of course, Dewey's theory of inquiry grew out of his rejection of the term "epistemology" and he worked his entire life to supplant it with more scientific, embodied terms. His suspicion of epistemology, and the various terms it employed, stemmed mainly from his rejection of the dualisms of the Modern period, which he believed married the worst aspects of classical metaphysics to enlightenment subjectivism. On Dewey's view, modern philosophy went wrong by attempting to:

... substitute an Idealism based on epistemology, or the theory of knowledge, for the Idealism based on the metaphysics of classic antiquity... Idealism ceased to be metaphysical and cosmic in order to become epistemological and personal ... It tried, after all, to put the new wine in the old bottles. (Dewey, 1920, pp. 49–51)

Such general accounts would appear elsewhere in Dewey's writings and were often tied to his critique of the "spectator theory of knowledge," which he seemed to trace from Kant back through the church fathers and eventually hung on the writings of Aristotle (MacPartland, 1945, pp. 291–3). This might explain why Dewey singled out Aristotle more often than Plato as a target for his polemics. Yet, as John Anton and F. M. Anderson have argued, even within Dewey's more biting criticisms of the classical tradition, there remains an apparent admiration (Anton, 1965; Anderson, 1967). Though, whenever he wished to praise something in antiquity—especially anything Aristotelian—he tended to couch it in generic terms of "Greek" thought. Anderson even notes that, "To Dewey 'Greek philosophy' is, practically speaking, synonymous with 'Athenian philosophy': this in itself is a significant equation" (p. 87, n. 2).

It is important to recognize that Dewey's generic references to "the Greeks" should not be taken as a mere aversion towards praising Aristotle. In fact, Dewey made reference to the "Greeks" one and half times as often as he referenced "Plato" or "Aristotle" singularly—1246, 793, and 841, respectively. Those numbers are represented by volume of his *Collected Works* as follows:

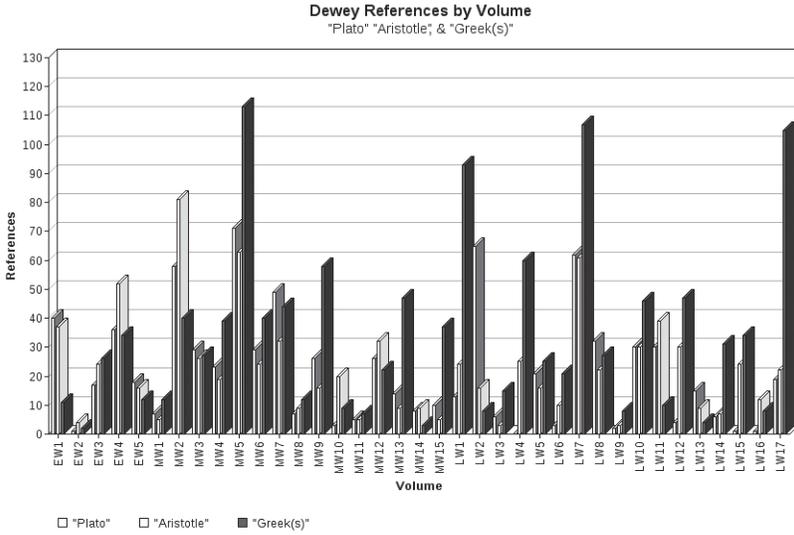


Figure 3.1 Referencing trends in Dewey’s Collected Works (Source: Intelix Past Masters/Carbondale, SIU Press; Image source: chartgo.com)

As the graph in Figure 3.1 indicates, Dewey’s tendency to generalize about ancient philosophy also increased as he got older, except for the spike in 1908, when he and Tufts published the *Ethics*. The volumes of *The Middle Works* contain 510 references to the “Greeks,” whereas *The Later Works* contain 651. References to “Plato” and “Aristotle” each drop slightly over that same duration (down 65 and 20, respectively). This seems to suggest something about how Dewey viewed and employed the classical tradition, especially with regard to later developments in his thinking. I shall argue that reading Dewey’s later, deepened appreciation for Greek philosophy in general, alongside the development of his naturalistic theory of inquiry demonstrates how the various threads of Greek organicism at play in his thinking were undergoing constant adjustment and mutual refinement.

Dewey’s general references to the “Greeks” should neither be seen as an indication of disinterest or unfamiliarity with the classical world nor as always a symptom of loose speaking. Rather, I believe he sought to recapture, sometimes unwittingly, something of the “spirit” of Greek thought, especially with regard to how it problematized human relationships with the natural world. As Anderson wrote:

Generally, when Dewey suggests that contemporary philosophers should do for modern culture what Greek philosophers did in their own time, or when

he speaks positively of Socrates, Plato or Aristotle, the emphasis is consistently on the ideas of thought as telic process. With shifting stress and accent, Dewey points to the awareness of the social problem, to their concern for intellectual criticism with a practical bearing, or even to the *spirit* of their queries. (Anderson, 1967, p. 98)

While Dewey may have shared with Plato particular concerns about education and with Aristotle certain commitments regarding method, it was the organic, inquisitive spirit that united them and other Greek philosophers with which Dewey most identified.

The organic spirit of Greek philosophy

What I am calling the organic spirit of Greek philosophy sprang up from the ground in the Greek city-states of Asia Minor during the fifth century B.C.E. where thinkers like Thales, Pythagoras, and Heraclitus began to speculate about *physis*. As George Herbert Mead put it, the origin of that speculation was largely determined:

... [B]y the physical character of their country. It broke them up into small communities largely situated upon the sea-coast with but slight possibility of spreading inland. The land itself except a few localities was not capable of supporting a large population even from the standpoint of the relatively small communities that inhabited them. It followed that the natural increase in population flowed out almost constantly except in later periods of Greek history over the sea in small contingents. (Cote, 2013, p. 390)

This social structure can be found in literature as far back as Homer and Hesiod. The earliest philosophers, therefore, would have been accustomed to viewing the world as a precarious one, in which change often occurred rapidly and violently. Consequently, their speculations centered on the interplay between stability and instability in the natural world and *physis* was a concept well suited to this aim.¹ The early Greeks did not see nature as something antecedent and wholly separable from the human. Instead, the view that they shared, which did not sharply distinguish between the human and natural realms, could be called—following Werner Jaeger—an “organic point of view.” As he put it, the ancient Greeks in general, always had “an innate sense of the natural,” wherein:

The concept of “nature,” [...] was without doubt produced by their peculiar mentality. Long before they conceived it, they had looked at the world with the

steady gaze that did not see any part of it as separate and cut off from the rest, but always as an element in a living whole, from which it derived its position and meaning. (Jaeger, 1986, p. xx)

This point of view filtered into every aspect of Greek life. Even philosophers who held a dualistic view of reality would not have drawn their distinctions along the lines of organic nature versus "inorganic" humanity. Regardless of how their speculations about change and permanence were worked out, the underlying assumption was always that human understanding was part and parcel of this larger picture, not separated from it.

Over and above this "physical" continuity between the natural and human realms, early Greek philosophy is colored by a picture of the universe, the *kosmos*, as both alive and orderly:

The "Nature" of which the first philosophers tell us with confident dogmatism is from the first a metaphysical entity; not merely a natural element, but an element endowed with supernatural life and powers, *a substance which is also Soul and God*. It is that very living stuff out of which daemons, Gods, and souls had slowly gathered shape. It is that same continuum of homogeneous matter, charged with vital force, which had been the vehicle of magical sympathy, that now is put forward explicitly, with the confident tone of an obvious statement, as the substrate of all things and the source of their growth. (Cornford, 1957, p. 123)

The consequences of this view held deep implications for how human beings were thought to relate to the world around them—experientially, epistemically, and ethically—and became the core of philosophical considerations.

Various strains of Greek organicism may be apparent in the writings of Xenophanes, Heraclitus, and Aristotle, but it also loomed large in the thinking of figures traditionally considered to be more abstract, such as Pythagoras, Parmenides, and even Plato. As Huntington Cairns wrote in his "Introduction" to *Plato: Complete Works*:

Plato was the culmination of several centuries of Greek speculation and he took full advantage of the insight which his predecessors had developed. But speculation assumes intelligibility. The insight that the world is system, is organic, therefore both orderly and alive, is the Greek view as far back as we have records. Because of this previous work in philosophy he was able relatively early in life to see the world as an entirety and to grapple with its implications. The Greek organic view stressed a living entirety made up of members. (1961, p. xvii)

However, since Plato's theory of forms is most often read as an idealistic solution to the stability/instability problem, the organic features of his thought have often been ignored, aiding in the rise of the various dualisms of Western thought—appearance/reality, mind/body, fact/value, and subject/object—each built upon a sensualist view of experience not present in early Greek thought, perhaps not even in Aristotle, with whom it is often associated.²

Besides speculating about a world which appeared quite unstable, these figures worked in a time of great cultural transition as well, in which an oral tradition was giving way to a written one. This required the repurposing of old terms to fit new concepts:

The Greece of 700 B.C., of Homer—and this was only two and a half centuries earlier—was completely non-literate; its early architecture, art, politics and poetry were the achievements of a people who could neither read nor write ... the transition can be summed up as a shift from the poetic to the prosaic, as this occurred not in the vernacular, but in that part of the language selected for preservation. (Havelock, 1984, p. 70)

The word the early philosophers used to indicate the function of organizing the yields of sensory perception was one such word. Derived from an earlier, Homeric usage, *empeiria* is a combination of the prefix that meant “in” or “on” and a root that meant “to try” or “to attempt.” In this sense, “experience” for the Greeks meant that the trials of the sea could be read on the chapped hands and weathered faces of the sailors who had survived them. For them, there would arise no need to speak of *erroneous* experiences, in the sense of that which is abstracted “out of” *peiria*, taking place within a mind, cut off from its surroundings. Instead, they spoke of *empeiria* as a middle state between perception on the one hand and knowledge on the other, but with a firm foothold in each. In this way, experience was, at once, *in* and *of* the world and, although it involved some measure of practical success, was not strictly identical with craft, or “*technē*” (Butler, 2003). Although Greek thinkers like Plato and Aristotle may have disagreed about the make-up of the world around them, one element common in their thought was that experience was a natural event, generated by that world. Simply put, experience for the organic-minded Greeks would be more like what is now called “life-experience.”

Such a view of experience yields three insights regarding the acquisition of knowledge that might appear quite alien to contemporary epistemologists. First, since experience was related to some notion of practical success, knowledge would have to possess a deeply practical character, as well:

The new effort to deal with abstractions seemed to require separate signification, a terminology of what we might call pure intellection. Thinking and thought as a conceptual process was recognized as replacing, or at least as supplementing the activities of sensing, of noting, of looking at, of perceiving and feeling.³ (Havelock, 1984, p. 80)

This usage had two significant effects. One was that references to knowledge were colored by a newly coined *reflexive* grammar. Havelock explains, “In oral language the actions of agents commonly acted upon something; the subject did something to an object. But here was a new kind of action, namely sheer intellection, which perhaps was not an action at all” (Havelock, 1984, p. 81). The other was that knowledge was necessarily viewed as *incomplete*. Just as experience accreted over time, so too would knowledge. Second, under an organic understanding of *empeiria*, knowledge would likewise have to possess a decidedly non-propositional flavor. On such a view:

[A] sentence or proposition expresses how a thing is *qualified* (*poion ti*) rather than *what it is* (*ti esti*). The point is apparently that any statement I make, for example, about virtue, will only qualify virtue in one way or another by saying that it has this or that property. (Gonzalez, 1995, pp. 185–6)

In other words, to say anything about a particular object or concept would be, *necessarily*, to say something incomplete, which may be more or less useful, but which could never be confused with what the thing is, as such, completely. Last, the practical, incomplete, and non-propositional characteristics of knowing imply that there is something of a process, or building up, toward robust knowledge from more inchoate cognitive states.⁴ In this way, intuition, creativity and deftness would be indispensable aspects of knowledge acquisition.

Under such a view, thought and action could be said to “fit” together and “reinforce” one another. This becomes important when considering that, from the earliest accounts, the core of Greek moral life was *aretē*, or “excellence,” rather than piety. In order to fully appreciate the emphasis on skill implied by this concept, we English speakers may be better off using the term *virtuosity* rather than the usual translation of “virtue” when referring to the Greek moral ideal. To be an excellent person was to be a *virtuoso*, illustrated by the Homeric heroes Achilles and Odysseus. The *aretē* of each—the unparalleled physical prowess of Achilles and intellectual cunning of Odysseus—is what raised each above other mortals. This type of potency was later clearly tied to the intellect in Socrates’ famous dictum “to know the good is to do the good.” And, in

Aristotle's *Ethics* (Barnes, 1984), we are told that reason is grounded in human experience and that *theoria* and *praxis* are ultimately united in that most philosophical of tasks—"thinking about thinking."

In summary, there appear to be a cluster of themes in Greek organicism relevant to Dewey's theory of inquiry. First, it offered a picture of the natural world as functional and growth oriented. Second, it employed a conception of experience rooted in *praxis* and continuous with bio-physical processes. Third, it created a vocabulary of knowledge acquisition which extended from notions of "doing" instead of "seeing." This distinction underscored three aspects of knowledge itself, namely its instrumentality (which entails reflexivity and incompleteness), its non-propositional elements, and its non-cognitive, intuitive origins. Finally, the praxeology delivered by Greek organicism focused on constructing and reconstructing habit through rational reflection with an aim toward better living.

Organicism and the development of Dewey's naturalism

Before these themes are tied to Dewey's naturalism and, more specifically, his theory of inquiry, it may be helpful to briefly trace how Greek organicism filtered down to him over the first few decades of his career. As a scholar who was neither trained as a classicist, nor primarily concerned with the history of ideas, it seems Dewey did not fully come to appreciate the Greek themes implicit in his work until well after he had joined the faculty at Columbia. As Walter Veazie recounts, Dewey's self-assessment as a Greek revivalist came sometime during the academic year between 1915 and 1916. But the path Dewey took to such a realization was an indirect one and was a long time in the making (1961, p. 3).

Going back to his graduate work at Johns Hopkins, Dewey was heavily influenced by the neo-Hegelian G. S. Morris, who rejected the dialectic of *Geist* in favor of a more Aristotelian, biological description of the dynamism of nature, as well as C. S. Peirce, who, "by his *own* account emerged from the German fog primarily by the assistance of Aristotle" (Veazie, 1961, p. 4). Under Morris's view, the traditional "subject" in epistemology was redefined as an organism, fully immersed in and interacting with a dynamic, organic environment. This move, which proved vital in Dewey's later thought, came to Morris from his mentor Trendelenburg, who had been sharply influenced by Aristotle's notions of potentiality and actuality and by Darwin's theory of evolution (Boisvert, 1988).⁵ On Trendelenburg's reading, the notion of *telos* was rendered a type of

biological end in both nature and organisms. Morris, in turn, appropriated these ideas as he aimed at detailing the *meaning* of existence and the undermining of dualisms. Peirce also handed down a few concepts to Dewey, via Darwin, that were inspired by the Greeks. One was what Peirce called *synechism*, the idea that the cosmos consists in a continuous whole—with none of its part being fully separable, determined or determinate—increasingly growing together in complexity and connectedness. Since the universe, according to Peirce, could not be fully understood in terms of its constituent parts, he argued that *synechism* was an essential heuristic hypothesis to all scientific progress, and Dewey apparently absorbed the lesson, although he did not see the same implications as Peirce toward the question of the immortal soul. Another Peircean idea was *tychism*, which was the thesis that chance was a fundamental aspect of reality, and which Peirce believed directly followed from *synechism*. As he saw it, “our knowledge is never absolute but always swims, as it were, in a continuum of uncertainty and of indeterminacy. Now the doctrine of continuity is that *all things* so swim in continua” (Peirce, 1931, p. 171). For Peirce, the combination of continuity and chance led directly to fallibilism, insofar as precision is impossible when measuring the values of continuous quantities. Thus, the laws of nature are probabilistic rather than absolute. As Peirce would put it, the laws of nature express the tendencies or *habits* of things. From this, Peirce proposed an evolutionary cosmology, the upshot of which was: from irregularity, regularity *emerges*. This view, according to Peirce, could account for increasing complexity and diversity insofar as it always allowed for possible deviations and derivations from any established rule.

These early experiences with Greek themes, albeit with a noticeable Darwinian slant, were reinforced at the University of Chicago, where Dewey worked closely with George Herbert Mead and Jane Addams, who both had intimate knowledge of classical thought and applied it to their work in social psychology and activism, respectively.⁶ By the time Dewey left Chicago for Columbia in 1904, philosophical naturalism was already on the rise in America and many of those working on the articulation of the naturalist position found its roots in the Greek tradition. George Santayana’s five-volume treatise, *The Life of Reason* (1905–6), which claimed to be built on the legacy of Plato and Aristotle and aimed at showing, “everything ideal has a natural basis and everything natural an ideal development,” is a prime example (Santayana, 1905, p. 21).

Dewey’s arrival at Columbia occurred two years after that of F. J. E. Woodbridge, who was known for his naturalistic reading of Aristotle, and one year after William Pepperell Montague, who was (along with Edwin Holt and

Ralph Barton Perry at Harvard) one of the leading proponents of the “new realism.” They were soon joined by Wendell T. Bush and the department at Columbia quickly moved to the forefront of the naturalism movement. Within a scholarly community of like-minded scholars, the naturalistic kernels of Dewey’s thinking could be nourished and would eventually produce fruits like *Human Nature and Conduct* (1922), *Experience and Nature* (1925), *Logic: The Theory of Inquiry* (1938), and a volume co-authored with Arthur Bentley, *Knowing and the Known* (1949).⁷ At the same time, the interest in Greek philosophy shown by the naturalists was diverging sharply from the scholarship being done both across the Atlantic and among classicists in the States. One example is Alfred North Whitehead’s Gifford lectures on process philosophy, which he called yet another effort in “a series of footnotes to Plato,” by which:

I do not mean the systematic scheme of thought which scholars have doubtfully extracted from his writings ... I mean that if we had to render Plato’s general point of view with the least changes made necessary by the intervening two thousand years of human experience ... we should have to set about the construction of a philosophy of organism. (Whitehead, 1929, p. 39)

If nothing else, Dewey and the Columbia naturalists would have railed with Whitehead against a reading of Plato which rendered reality, as Whitehead put it elsewhere, into “two natures, [where] one is the conjecture and the other is the dream” (Whitehead, 1920, p. 30).

Given these early encounters with Greek organicism, it should seem no stretch to say the commitments of Dewey’s naturalism were *largely* informed by a Greek spirit, especially in the account it offered of the sensual, volitional, and desirous aspects of knowledge acquisition, elements which Dewey clearly incorporated into his theory of inquiry. His theory was not strictly an epistemic one, but also reached down into his work in ontology, aesthetics, ethics, and political theory. There will not be enough space here to connect all of the dots between these areas, Dewey’s functional accounts of nature and experience, and the Greek notions of *physis* and *empeiria*. Fortunately, there is a raft of excellent scholarship regarding Dewey’s philosophy of experience which supports my reading of his theory of inquiry as embedded in his ontology and theory of experience (Alexander, 1987; Boisvert, 1988; Eldridge, 1998; Tiles, 1990; Hickman, 2001). Thus, I will limit my remaining comments to those aspects of Greek organicism which pertain directly to transitions from immediate experience to knowledge acquisition, trusting that it will be obvious how those

Greek aspects may be read back into what has already been written by others about Dewey’s theory of experience.

Knowledge as “doing”

Dewey insisted that investigations into any area of human understanding should always begin with the activity itself in order to get a grasp on its epistemic value, instead of starting from the imagined cause of such behaviors. Jim Garrison, for one, has emphasized this unique aspect of Dewey’s thought:

For Dewey scientific inquiry (thinking), was a process engaged in by some natural existences, including human beings ... As Dewey saw it, we are participants in an unfinished universe rather than spectators of a finished universe. That is why our action, our behaviors, our social constructions, deconstructions, and reconstructions have ontological significance. (Garrison, 1994, p. 8)

The upshot of this was that while nature was in constant change, human beings could still act in their environment by testing their beliefs and adjusting them according to experience.

Garrison finds the inroad to this feature of Dewey’s inquiry to be *intuition*. He argues that intuition for Dewey is a part of operative knowledge which helps turn an actual situation into a *desirable* one; “for Dewey all inquiry, not just moral inquiry, begins and ends with an affective intuition that involves a distinct feeling for the quality of a situation” (Garrison, 1997, p. 33). This belief can be read in many of Dewey’s essays, particularly two—“Affective Thought” (1926) and “Qualitative Thought” (1930)—but its foundations are located in an earlier paper, “The Reflex Arc Concept in Psychology” (1896), which has been regarded as one of the most significant turning points in the research of human behavior. There, Dewey attacked the mechanistic view of stimulus and response that dominated the psychological research of the period and mimicked an older, erroneous mind–body dualism by placing stimulus in opposition to response. He wrote:

... [W]e still incline to interpret the latter [response] from our preconceived and preformulated ideas of rigid distinctions between sensations, thoughts and acts. The sensory stimulus is one thing, the central activity, standing for the idea, is another thing, and the motor discharge, standing for the act proper, is a third. As a result, the reflex arc is not a comprehensive, or organic unity, but a patchwork of disjointed parts, a mechanical conjunction of unallied processes. (Dewey, 1896, p. 97)

In this regard, Dewey complained, the reflex arc was inaccurate because it placed the parts of an act prior to the whole. It failed to recognize that stimulus, movement, and response only made sense as an interpretation of an event *after* it had occurred; moreover, he claimed the notions of stimulus and response were non-existent entities that only gain meaning once placed in relation to one another. Even this early in his career, one can see Dewey's preference for naturalistic accounts. Under his reformulation, the reflex arc does not run in a linear direction from stimulus, through response, to movement. Rather, multiple stimuli, responses, and movements arise simultaneously and are experienced, in chorus, as a singular, unbroken act, "which is as experienced no more mere sensation than it is mere motion," and thus, when analysis dissects the reflex arc into separate states, "we have, only the serial steps in a co-ordination of *acts*" (Dewey, 1896, p. 106). Simply put, before an act can be divided into parts, its quality as a whole must be explicated.

With this in mind, Dewey looked to give an account of inquiry that could present how it showed up within various functional conditions, or modes of experience. Those modes are, according to Dewey, natural conditions that determine how organisms would deal with the "instability" and "precariousness" of experience. In his earliest text devoted to inquiry, *Studies in Logical Theory* (1903), Dewey set out on this project. There, he raised "important questions about the relations between dominantly aesthetic, moral, and affectional modes and subject-matters of experience and the cognitional mode and its specific subject-matter" (Anton, 2005, p. 138). *Studies* marked the beginning of what Joseph Ratner, in 1939, referred to as Dewey's recasting philosophy as a "general logic of experience" (Schilpp, 1951, p. 71). However, while Dewey made mention of a number of modes in that volume, he never offered a comprehensive list anywhere else in his writings.

The absence of such a list should not lead one to read Dewey's use of modes as an appeal to some nebulous, ineffable Absolute leading to a perverse "metaphysics of experience" (Cochran, 2010, p. 62). Rather, it should be seen as an initial exploration into a new conception of logic, the broad strokes of which needed to be worked out prior to the details. In fact, the majority of Dewey's works between the 1903 *Studies* volume and his *Logic: The Theory of Inquiry* could each be seen as working out the details of one of the fields of inquiry (ethics, art, religion, science, and politics) which arise out of the diverse modes of experience (the moral, aesthetic, religious, cognitive and social). "When we take Dewey's works severally," as Ratner put it:

... [T]hey very naturally group themselves into special (or specific) logics of the typical (or distinctive) modes of experience. Thus to mention only some of his representative works: *Human Nature and Conduct* is the special logic of the socio-ethical mode of experience; *Art as Experience* is the special logic of the esthetic mode; *A Common Faith*—of the religious; ... *The Quest for Certainty* and *Logic: The Theory of Inquiry*—comprise the special logic of the scientific mode of experience; *The Public and Its Problems*, *Individualism Old and New*, *Liberalism and Social Action*—comprise the socio-practical or utilitarian; ... And finally *Experience and Nature*. [Therein] All modes of experience are naturally interconnected, being socio-cultural differentiations of common experience. (Ratner and Altman, 1964, p. 71)

The influence Ratner’s reading has had on Dewey scholarship warrants lengthy quoting. However, the last remark of the passage—that, in *Experience and Nature*, the diverse modes of experience are naturally interconnected—is perhaps the most informative. As Ratner explained, the modes of experience are, for Dewey, differentiations of a cultural sort, each of which imparts a specialized form of cultural “intelligence” interwoven into the fabric of common experience, and thus—nature. As Alexander and Eldridge have suggested, there seems to be a “guiding thought” in Dewey’s body of work; *however*, picking it out does not seem to be a matter of choosing *between* the “aesthetic dimension of experience” and “cultural instrumentalism” once knowledge as “seeing” is connected to knowledge as “doing.”

The “instrumental” features of knowledge

If Dewey’s work on the modes of experience is to be taken seriously, the immediacy of experience could be said to possess certain pre-cognitive elements, which are enriched through inquiry toward more robust cognitive states. This is probably what led to Dewey positing the concept of the “indeterminate situation” as “the antecedent condition” of inquiry. In his words, “Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole” (Dewey, 1938, p. 108). For Dewey, the organic interaction within an indeterminate situation will be transformed when:

... [E]xistential consequences are anticipated; when environing conditions are examined with reference to their potentialities; and when responsive activities are selected and ordered with reference to actualization of some of the potentialities, rather than others, in a final existential situation. (1938, p. 111)

Where many have seen this aspect of Dewey's work as a "life-long effort to practicalize intelligence," he was adamant that his goal was rather to "intellectualize practice" (Eldridge, 1998, p. 5). The former suggests intelligence must be *made* practical, while the latter implies experience is already inquiry-laden. Unsurprisingly, a straight line can be drawn from this mischaracterization to the type of charge leveled against Dewey's thought, and pragmatism at large, as philosophical underwriting for crass opportunism.

The difference between "intelligence practicalized" and "practice intellectualized" could be framed as one between rudimentary and robust acts of inquiry. The downside to any rudimentary form of inquiry is that it yields a very narrow set of solutions. The traditions and techniques it produces will disclose only a limited number of possible solutions. Conversely, scientific inquiry, according to Dewey, can free meaning from the interests of a particular group and allow that meaning to become more abstract insofar as "semantic coherence, as such, is the controlling consideration" (1938, p. 119). What issues forth is a pattern of reasoning that guides inquiry *vis-à-vis* subsequent indeterminate situations. And, while this also amounts to a set of norms or imperatives, each is accepted or rejected only in terms of coherence with one another. This opens up the set of possible solutions to a problem by offering a *logic of the situation*.

As such, Dewey's *Logic* contained a marked difference in its treatment of the modes of experience. Dewey clearly had moved beyond discussing the various modes of experience and put forth arguments that were "intended to indicate that the different objectives of common sense and of scientific inquiry demand different subject-matters and that this difference in subject matters is not incompatible with the existence of a common pattern in both types" (1938, p. 119). In response to Ratner's critique, Dewey commented, "Dr. Ratner has put his finger upon the main 'shift' in my writings"

... I should, from the start, have systematically distinguished between knowledge as the outcome of special inquiries (undertaken because of the presence of problems) and *intelligence* as the product and expression of cumulative funding of the meanings reached in these cases. (Schilpp, 1951, pp. 520-1)

Two points of clarification are needed. The first is that there is a salient difference between knowledge as the "outcome" and intelligence as the "habit" of the cognitive mode of experience, on one hand, and those outcomes and habits that are the byproducts of non-cognitive modes, on the other. When taken as a product of these latter, non-cognitive modes, knowledge is strictly passive and intelligence manifests itself as a supplicatory method

for dealing with problems. In other words, there are innumerable ways of coping with precariousness, few means for *transforming* it. The second point of clarification to be noted is that inquiry, understood in its broadest sense as enrichment within any of the modes of experience, may only provide the type of intelligence that allows for the *accommodation* or *avoidance* of adversity. Although Dewey believed that everyday inquiry is continuous with the more specialized, cognitive type of inquiry, he argued that only the virtues of the sort of intelligence, of which science was an example, could "give expertness of dealing with materials and tools, and promote the development of the experimental habit of mind" (Dewey, 1920, p. 86).⁸ Rather than viewing Dewey's distinction between cognitive and non-cognitive modes of experience as an indication of an underlying scientism, as many have, it again seems more appropriate to view it in terms of the difference between reflexive and non-reflexive actions identified in Greek organicism. Only the reflexivity of cognitive modes of experience can yield principles for further indeterminate situations as well as insights about the one doing the inquiring—thus uniting the Latin imperative, "*Sapere aude*," with the Greek aphorism, "*Gnothi seauton*."

Conceptually, the "indeterminate situation" also reveals the incompleteness in any inquiry. According to Dewey, "Every such interaction is a temporal process, not a momentary cross-sectional occurrence;" that is to say, it is best characterized as a process (1938, p. 110). While rudimentary inquiry is a process of accommodation to meet demands of the environing conditions, cognitive inquiry is a process of adjustment in the situation, in both the environment and the organism. The result of which is an increase in complexity for both. As Dewey described it, "The temporal quality of inquiry means, then, something quite other than that the process of inquiry takes time. It means that the objective subject-matter of inquiry undergoes temporal modification" (1938, pp. 121–2). Twenty-two years earlier, in *Democracy and Education*, Dewey referred to this temporal modification as "plasticity," and described it therein as "the capacity to retain and carry over from prior experience factors which modify subsequent activities" (1916, p. 47). In his later work, Dewey would refer to this as the capacity for "habit-formation." As he put it in *Experience and Nature*:

... [A]n organism acts with reference to a time-spread, a serial order of events, as a unit, just as it does in reference to a unified spatial variety. Thus an environment both extensive and enduring is immediately implicated in present

behavior. Operatively speaking, the remote and the past are “in” behavior making it what it is. (1925, p. 213)

Thus, *any* transformation of the indeterminate into the determinate is a process of once again returning to a “unified whole,” except that, *qua* the outcome of cognitive inquiry, the determinate situation is a context that has been enriched, *i.e.* it has gained structure, through a newly emergent habit. This is the major difference between habits as the outcome of cognitive inquiry and those of the non-cognitive experience. The habits which are employed in the former, which Dewey called intelligence, involve manipulation of abstract symbols, or meanings, whereas the latter involve the manipulation of values, which are always more proximate than meanings. In other words, cognitive habits form the principles of thought, on which fields like logic and mathematics are based. Non-cognitive habits form the principles of normativity, which form the subject matters of aesthetics and ethics. The former yields knowledge; the latter yields *attitudes*. But, for Dewey, all knowledge—even that which has been traditionally termed “propositional”—is essentially a skill, one acquired through developing appropriate habits. The consequence, then, is that even the semantic and logical rules that govern language are habitual.

The non-propositional elements of knowledge

Although both types of inquiry can lead to the formation of habits, only the cognitive variety can lead to the type of re-evaluation of its habits that Dewey referred to as “reconstruction.” Cognitive inquiry achieves this through the versatility of meaning. As Dewey put it, “the more numerous our habits the wider the field of possible observation and foretelling. The more flexible they are, the more refined is perception in its discrimination and the more delicate the presentation evoked by imagination” (1922, p. 123). Because cognitive inquiry employs habits that deal with meaning, this type of inquiry can lead to the changing of those habits whenever they produce a solution that does not cohere with other meanings. This is where experimentation, which Dewey believed was merely a description of the default setting in which all “live creatures” operated, comes into focus within his account. As he had explained over a decade earlier, in his *How We Think* (1910), when any organism is presented with a series of events it will inevitably relate them to past experiences. Dewey claimed that the limitation of valuation within non-cognitive modes of experience is that it “affords no way of

discriminating between right and wrong conclusions" (1910, p. 294).⁹ Inquiries made from cognitive modes of experience, on the other hand, have an apparatus for distinguishing between competing theses. This apparatus is the *habit* of abstraction, or meaning manipulation. As Dewey put it, "Experiment is the chief resource in scientific reasoning because it facilitates the picking out of significant elements in a gross, vague whole" (1910, p. 298). He thought new interpretations arose through experimentation in response to particular problems. The difference, in the end, between cognitive inquiry and non-cognitive valuation boils down to the ability to create new habits via new interpretations of the meaning of action.

All of this explains why Dewey became so concerned about precision of terminology in the field of epistemology, and why he eschewed that title for the field of knowledge acquisition as well. His work with Arthur Bentley in *Knowing and the Known* aimed to "fix a set of leading words capable of firm use in the discussion of "knowings" and "existings" in that specialized region of research called the theory of knowledge" (1949, p. xi). The collected essays of which *Knowing* was comprised originally appeared between 1944 and 1949 and were the result of a rich correspondence which began in November of 1932 and continued until the winter of 1951, when Dewey had become too weak to maintain it. The collected correspondence, edited by Sidney Ratner and Jules Altman and published in 1964 by Rutgers University Press, shows itself to be a worthwhile study as a proving-ground for a terminology they hoped would clarify key concepts in Dewey's *Logic*. Though many terms traditionally used by Dewey were dropped for the publication of *Knowing* (for example, "experience," "interaction," and "knowledge"), one of the main holdovers was "inquiry," indicating how much of the theoretical structure of their collaboration owed to Dewey's view (Ratner and Altman, 1964, pp. 44–5).

Also retained in *Knowing and the Known* was Dewey's notion of "situation," now tied to more deeply to "events," "occurrences," and "objects." As they wrote:

When an event is of the type that is readily observable in transition within the ordinary spans of human discrimination... we shall call it *occurrence*... Object is chosen as the clearly indicated name for stabilized, enduring situations ... Thus, any one of the three words Situation, Occurrence and Object may, if focusing of attention shifts, spread over the range of the others. All being equally held as Event. (Dewey and Bentley, 1949, p. 70)

Although most naturalists of Dewey's era rejected substance ontology and the Cartesian assumptions drawn from it, what made Dewey unique among them was *how* he rejected it. As he put it:

... [W]hat we call matter is that *character* of natural *events* which is so tied up with changes that are sufficiently rapid to be perceptible as to give the latter a *characteristic* rhythmic order, the causal sequence. It is no cause or source of events or processes; no absolute monarch; no principle of explanation; no substance behind or underlying changes—save in that sense of substance in which a man well fortified with this world's goods, and hence able to maintain himself through vicissitudes of surroundings, is a man of substance. The name designates a *character* in operation, not an entity. (1925, p. 65)

While “characterization” takes on an important role in *Knowing and the Known*, one has to turn to the Dewey–Bentley correspondence to grasp what he meant by the “character” of “events.” In a letter dated December 4, 1945, Dewey wrote to Bentley that in the *Logic* he “had need to distinguish the concrete and abstract from the standpoint of logical use in inquiry,” and “As I used ‘character,’ it is a synonym ... [for] an ‘abstract’ noun” (Ratner and Altman, 1964, p. 499). Reading this and surrounding correspondence against an essay Dewey published in the *Journal of Philosophy* that same month, titled “Ethical Subject Matter and Language” (1945), suggests that Dewey felt this use of “character” was all of a piece with its use in his moral writings. This also links up with the abandonment, in *Knowing and the Known*, of the separate terms “experience” and “knowledge” in favor of a single term—“knowing-known”—to cover both, as well as the choice to drop “individual” in favor of “organism.” Under this more precise terminology, Dewey and Bentley hoped to make clear that human beings themselves were also events.

Just as Darwin had shown that a species was not a static *eidos*, pre-ordained by some unmoved mover, Dewey sought to prove that what we take to be individual objects are actually confluences of significance, and what we take to be an individual intelligence is merely a conrescence of habit—both cultural and experiential. In this way, reason is not something over and above nature, but is immersed within it as a part of cultural experience. He wrote:

... [R]eason is experimental intelligence, conceived after the pattern of science, and used in the creation of social arts; it has something to do. It liberates man from the bondage of the past, due to ignorance and accident hardened into custom. It projects a better future and assists man in its realization. And its operation is always subject to test in experience. (Dewey, 1920, p. 135)

Instead of positing reason as the tenant of a reified mind, as naturalists like Santayana seemed to do, Dewey argued that the intellect was a function that emerged from the *transaction* of experiencing events (or “organisms”) from

within the context of other events surrounding them (or “environment”) toward working out unstable situations—it was, in a word, a habitual.

Knowledge, praxis, cosmos—habit and growth

“Habit” is another term that appears in the Dewey–Bentley correspondence, but not in their finished manuscript of *Knowing and the Known*. This seems to be Bentley’s influence. Dewey, looking for a substitute for “conception,” wrote on July 2, 1945: “There are attitudes, dispositions, habits, which operate continuously and for the most part steadily and stably. (‘Habits’ is perhaps the best word because it is a transactional word. ... *Attitudes* being always *toward*, and *dispositions*, arrangements, of something)” (Ratner and Altman, 1964, p. 436). Bentley’s response to Dewey, however, made it clear he thought habit to cover only some of the instances in which “conception” might be used, and misused, and so it was not replaced. Later, however, Dewey and Bentley agreed “100%,” as Dewey wrote, that habit was a not merely something possessed by an organism, but was instead in the entire situation, it was, as they called it a “habit-transactional” (Ratner and Altman, 1964, p. 496). More will need to be said about transactions below, but first more must be said about how Dewey viewed habits as encompassing both moral character and the character of situations.

For Dewey, habits were intimately connected to his conception of “growth,” which also held special meaning in his work. In his words:

Habits take the form both of habituation, or a general and *persistent balance* of organic activities with the surroundings, and of *active capacities* to readjust activity to meet new conditions. The former furnishes the background of growth; the latter constitute growth. (1916, p. 57)

A general definition of growth in this sense can be found earlier in *Democracy and Education*, where Dewey called growth the “cumulative movement of action toward a later result” (1916, p. 46). This definition, however, is perhaps too vague. Dewey probably did not mean to reinstate what he saw as “a false idea of growth or development,—that it is a movement toward a *fixed* goal,” so some unpacking is required (1916, p. 55). Dewey’s own explication is only marginally helpful: “Growth is [mistakenly] regarded as having an end, instead of being an end;” it “has no end beyond itself” (1916, pp. 55–7). Even among Dewey’s proponents, this has been found problematic:

Dewey's claims about "growth" ... must, therefore, be understood carefully, if not jettisoned outright. An emphasis on growth must be complemented by the articulation of aims more consistent with a particular view of human flourishing ... It was a wonderful chainsaw for clearing the forest of antiquated trees. But, like most chainsaws, it's not very helpful for planting and cultivating. (Boisvert, 2002)

Granted, the efforts Dewey made to identify the "conditions of growth" throughout *Democracy and Education* and *Human Nature and Conduct* do not, by themselves, fully establish growth as a building block for a full-fledged moral philosophy; yet, when the concept is considered in juxtaposition with the features of Greek organicism already outlined, its subtle upshots become more apparent.

Dewey believed a better understanding of "immaturity," which for him included the notions of capacity and potentiality, would help clarify his view:

Capacity may denote mere receptivity, like the capacity of a quart measure. We may mean by potentiality a merely dormant or quiescent state—a capacity to become something different under external influences. But we also mean by capacity an ability, a *power*; and by potentiality potency, force. Now when we say that immaturity means the possibility of growth, we are not referring to absence of powers which may exist at a later time; we express a force positively present—the *ability* to develop. (1916, p. 46)¹⁰

Achieving a new "power" of interaction with the environment through the reconstruction of habit is best understood as a pause, not a break in the process of growth. This is the point that Dewey later developed in his 1932 revision of the *Ethics* text, where he wrote, "It is in the quality of *becoming* that virtue resides. We set up this and that end to be reached, but the *end* is growth itself. To make an end a final goal is but to arrest growth" (1932, p. 306).

With these statements, Dewey wanted to show that character (his expression for abstract tendencies to act, or "principles") and conduct (actual acts) are not only *inseparable*, because they are different sides of habit formation, but also that the habits produced by inquiries within the cognitive modes of experience provide freedom to individuals insofar as they open up the possibility for new interpretations, whereas habits formed through repetition, i.e. tradition, restrict freedom, and often become our masters by restricting the growth of reconstruction (Dewey, 1922, chapters 2–3). Growth, as Dewey saw it, is naturalistic insofar as it eradicates the supposed ontological distinction between abstract "Reason" on the one hand and immediate experience on the other that has

colored most of philosophy since the enlightenment. According to Dewey, inquiry, and *ipso facto* the growth that arises out of it, always already takes place in the *having* of an experience. If Dewey’s theory had stopped there, it would be quite similar to other naturalists of his day; however, the above evidence seems to suggest his view of growth was also *ontological*. For instance, in the third chapter of *Knowing and the Known*, Dewey and Bentley offer the following:

A. Postulations for Behavioral Research

1. The cosmos: as system or field of factual inquiry.
2. Organisms: as cosmic components
3. Men: as organisms.
4. Behaviors of men: as organic-environmental events.
5. Knowings (including the knowings of the cosmos and its postulation): as such organic-environmental behaviors. (1949, p. 84)

With a theory of inquiry so outside of the mainstream, it should not be surprising that Dewey’s view received more than its fair share of critics.¹¹ Richard Gale, for one, has characterized Dewey’s view as a Promethean mysticism:

The metaphysics of *Experience and Nature*, far from being an empirically based description of the generic traits of existence, can best be understood as a transcendental deduction argument for what nature must be like if it is to be possible for inquiry to take place in it, and this results in an anthropomorphic metaphysics that ensures the world will be a fit place for Promethean endeavor to control nature through inquiry. (Cochran, 2010, p. 57)

Gale identifies three “underlying doctrines” within Dewey’s naturalism that typify metaphysical speculation insofar as they “do not admit of any objective verification” (Cochran, 2010, p. 75). The first is what he calls Dewey’s “Humpty Dumptyism,” which stems from the Deweyan worry that “if we ever let [reality] fall apart into numerically distinct pieces, not all the king’s philosophers can put it back together again into relational complexes” (Cochran, 2010, p. 60). Next is what Gale designates as Dewey’s “organism,” which he attributes to Dewey’s early Hegelianism and affinity for the Romantic poets. Gale points to Dewey’s notion of mutual dependency, such as the one between lungs and air, as a hallmark example of his tendency to overblow the role of organisms:

Dewey’s claim of a mutual dependency between lungs and air, and, more generally, between an organism and its natural environment, is dubious, for the air can exist without there being lungs to breathe it and a natural environment can survive the demise of all organisms. (Cochran, 2010, p. 65)

Last, Gale holds up Dewey's reliance on the notion of "continuity" as the third pillar of his mystical metaphysics. Because Dewey was so adamantly against reductive approaches in the sciences and philosophy, Gale concludes that what Dewey meant by "continuity" must have been of a top-down variety, tantamount to panpsychism.

These criticisms may appear, at first blush, quite damaging to Dewey's position—particularly when considering it in connection with Greek organicism. However, there seems to be something incredible in each of the supposed "mystical" doctrines Gale has put forth. First, while Dewey would have assented to the notion that reality could fall into "numerically distinct pieces," he would have seen any such distinction as just a matter of a "selective emphasis." Furthermore, just as respiration transforms the object of air chemically, physically, and volumetrically, so an organism transforms its environment. That the natural environment would survive the demise of all organisms (albeit in a significantly diminished capacity), or the existence of air would continue without lungs, does not negate that the changes made by these respective involvements is not constitutive. Finally, to suggest that any notion of continuity must conform either to reductionism or panpsychism seems a completely wrongheaded false dichotomy.

Transaction and non-linear growth

What Gale's reading of Dewey fails to fully consider is the centrality of *transaction* in *Knowing and the Known*. In the fourth chapter, Dewey and Bentley introduce the term:

... [L]et us now set down in broad outlines three levels of the organization and presentation of inquiry in the order of their historical appearance ... *Self-action*: where things are viewed as acting under their own powers. *Inter-action*: where thing is balanced against thing in causal interconnection. *Transaction*: where systems of description and naming are employed to deal with aspects and phases of action, without final attribution to "elements" or other presumptively detachable or independent "entities," "essences," or "realities," and without isolation of presumptively detachable "relations" from such detachable "elements." (1949, pp. 107–8)

In accounting for the development of these levels of inquiry, the origins of self-action are located within the proto-scientific theories of ancient cultures,

interaction in the mechanistic theories of Galileo and Newton, and transaction in the relational perspectives opened up by quantum and magnetic field research. In the notes to this passage, it is explained that "Dewey's early employment of the word 'transaction' was to stress *system* more emphatically than could be done by 'interaction,'" and is compared with his use of "integration" in the *Logic* and is an extension of the position taken in "The Reflex Arc" (Dewey and Bentley, 1949, p. 116, n. 8). Dewey and Bentley were explicit that each of these three levels remains available in any inquiry, which connects up nicely with Dewey's earlier claims about the modes of experience and the incompleteness of Greek organicism. Gale's criticism seems to stem from an interactional viewpoint, however, which turns on linear notions of causality, progress, and growth. What is meant by "linear" refers to those systems or processes which follow an analog series of steps aimed at a particular goal, clearly defined antecedently to action—what Dewey often called final ends, in a disapproving tone. In linear frameworks, causal arrows (and *ipso facto* progress) point in a singular direction.

As shown, Dewey believed that growth was an inevitable aspect of life, one that could be either nourished and directed, or untended and chaotic. The latter form often stems from a classically liberal, laissez-faire approach that extends from the interactional perspective, one which can lead to overgrowth and morbidity. Dewey rejected this approach and instead sought a growing *together* of individuals *within* a community that resulted in what he called *social intelligence*. This holds interesting implications for both Dewey's philosophy of education and his political philosophy. James Scott Johnston nicely sums up the connection between Dewey's theory of inquiry, growth, and his views on education:

To construct meaningful facts about the world is to expand the fund of meaning one has. To expand the fund of meaning one has is to enrich present and future experiences. Inquiry is the primary means by which growth is occasioned, and inquiry is a habit that is (and must be) developed, brought to bear on environmental and social situations. To develop this habit is precisely what is meant by education. (Johnston, 2006b, p. 111)

For Dewey, education fails when it seeks only to foster the growth of the individual and not the public, or situation, at large. In this way, it seeks a singular, final end, and is, therefore, linear in its practice.

By contrast, the educational practice Dewey sought to develop was a "non-linear" process meant to increase experiential complexity (in the sense of richness) through a chorus of interrelated events and feedback loops. Nonlinear

education comes not from some teleological design prior to action, but rather emerges *through* action. As such, causal arrows (and progress) simultaneously point in multiple directions, toward what Dewey called ends-in-view. The difference between linear and non-linear conceptions of growth is equivalent to the difference between the progress made when traveling toward a set destination and the general progress one makes when fitness training. Only in the former type of activity is growth measured according to a quantifiable *telos*. Yet, when a new indeterminate situation arises, those who have experienced non-linear growth, instead, will be able to adapt to the changes in the situation like a healthy organism can adjust to changes in its environment or a skilled jazz musician can improvise around the notes she hears.

There is ample evidence from Dewey's life and work to suggest that non-linear growth was the primary value in his socio-political thinking, as well, one he called both the means and "the only end" from which he believed a better future could emerge through the process he called "creative democracy." Far from naively espousing this ideal, however, Dewey took growth to be an arduous and daunting task, but one that was nevertheless indispensable to progress. What sets Dewey's advocacy for public adaptability apart from other philosophies of social progress is its circumvention of Thomistic notions of Aristotelian teleology, which was a key maneuver in his philosophical naturalism, as well. Just as Dewey's naturalism adopted non-linear depictions of nature as an "enviroming field" and of human psychology as a matrix of "sensori-motor coordination," so too was the view of social progress he adopted non-linear; it did not hang on the kind of final, utopian political end espoused by many others. The distrust of democracy held by Greek thinkers like Plato and Aristotle was likely rooted in problems similar to those faced by our American democracy—successful democratic constitutions require citizens to have rich repertoires of cultural experience, critical apparatuses finely tuned to subtle political nuances, and the intellectual maturity to not be threatened by alternative points of view—while at the same time requiring a process sufficiently streamlined to address public needs with efficiency and timeliness. Simply put, "democracy is too simple for complex societies and too complex for simple ones" (Benhabib, 1996, p. 42). Dewey would couch the problem in this way: social intelligence is a property of publics, not individuals; yet, democratic institutions are aimed solely at the education of individuals and not publics. This mismatch is why democracies often fail and why Dewey spent so much of his time championing "creative democracy" as a "way of life," instead of merely a mode of governance. The difference hangs on learning "to

treat those who disagree—even profoundly—with us, *as those from whom we may learn*” (Dewey, 1939, p. 228). This resonates deeply with one of the most enduring aspects of Greek philosophy—a pursuit of wisdom that started with the problems and powers of humankind, and placed these in dialogue with the surrounding world.

Yet, to show how the preceding ideas jibe with the most salient features of Greek organicism, and why I believe Dewey sought to capture its general spirit, it may be best to allow him to speak for himself. In an encyclopedia entry titled “Humanism and Naturalism,” one of several contributions to *A Cyclopedia of Education* (1912–13), Dewey wrote:

Greek classic philosophy presents, upon the whole, a view of things in which there is a balance between naturalism and humanism ... classic Greek idealism was idealistic in the sense that it had a teleological view of nature. Nature and mind were not regarded as two forces working either together or against each other, but as means and end, causal conditions and final values, potentiality and actuality. (pp. 214–15)

This article, written only three years before Dewey disclosed his interest in Greek philosophy to his graduate students at Columbia, shows what he hoped to revive. It continues:

... [F]ound in the *revival of Greek philosophic thought* [is] a means of justifying the growing interest in the phenomena of physical and human nature ... The prevailing way of conceiving the relation of man and nature was that of a microcosm to a macrocosm. Man was in small edition that which the universe was in large. This union, resting upon the use of Greek thought and the emulation of the free *Greek spirit* to justify a free and full satisfaction of human capacity through natural conditions, was, however, soon undermined from both sides. (pp. 215–16)

Perhaps these statements will lead scholars to look more closely at what Dewey found inspiring in Greek philosophy. As he concludes:

... [C]ontemporary philosophy and contemporary educational theory may be said to be confronted with a common problem: The discovery of the common background or matrix in which humanistic and naturalistic interests are united; and the tracing of their respective differentiations from this community of origin—a differentiation, however, which should not become a separation, and which, accordingly, secures the possibility of fruitful interaction between them whenever desired. (p. 217)

Notes

- 1 At first glance, such a concept may appear to correspond completely with a contemporary “physical” understanding of nature, and it is often translated as such. Yet, the connotation of this term, “organic growth,” stands in sharp contrast with the modern conception of nature built on the Latin equivalent *natura*, indicating “birth,” and handed down to history by figures like Descartes and Newton.
- 2 According to John MacPartland, Aristotle “speaks of knowledge as a ‘vision,’ ‘view,’ or ‘seeing.’ He knows very well that a misconception might easily arise here, and that is why he customarily says that knowledge is an immaterial act, but we do not see the immaterial, hence we have to take our terms from the material acts we see going on around us and use them analogically to describe immaterial activity. Thus the terms ‘vision,’ ‘view,’ or ‘seeing’ mean to view *from without* when they describe the way the eye sees its object, or the way a spectator views a spectacle. But when they describe the manner of seeing of the knower, that is, when they describe an immaterial act, they still mean a ‘vision,’ ‘view,’ or ‘seeing,’ but *from within*. This follows from the fact that the knower is the other, intentionally or immaterially, hence his view of reality is *from within*. In like manner, by contrast with the passive view of the spectator, who is external to the object, the view of the knower is vital, because he ‘lives the life of the other.’” (MacPartland, 1945, p. 292)
- 3 Havelock continues, “The pioneers preferred to adapt old terms, rather than invent new ones. *Noein*, to be aware or sensible of, *phronein*, to have wits, *logizesthai*, to tally, *skopein* to look at, *epistasthai*, to get on top of (in mastering a skill) were converted to the senses of thinking, reasoning, analyzing, understanding scientifically, and the corresponding nouns, *phronesis*, *episteme*, *nous*, *dianoia* (thought, science, mind, intellect) began to turn into indexes of sheer thought and abstract intellection” (Havelock, 1984, p. 81). See also Joanne Waugh’s reference to this shift in “Neither Published nor Perished: The Dialogues as Speech, not Text” (1995).
- 4 For instance, Robert Scharff has suggested that the Socratic paradox might be resolved by thinking of these claims of ignorance and his apparent wisdom as involving some sort of “vital understanding,” or what Heidegger called *verstehen* (Scharff, 1986).
- 5 Trendelenburg synthesized these two ideas into what he called “constructive motion” which he saw as the common trait between thought and being. On one hand, thought moves from potentiality to actuality, per Aristotle, as it *becomes* the object that is thought, on the other hand, being moves from potentiality to actuality, per Darwin, through natural selection. For a more detailed description of Trendelenburg’s “constructive motion,” see Raymond Boisvert’s *Dewey’s Metaphysics* (1988, pp. 22–4).
- 6 In her autobiographical account of her work at Hull House, Addams writes

of organizing Hellenic festivals, where classical philosophers and playwrights would be read and discussed (Addams, 1910). Renewed scholarly interest in Mead has revealed a deeper interest in the development of classical philosophy than previously realized. In fact, it seems that he was working, during the 1890s when he and Dewey were colleagues, on a book-length manuscript regarding the “origins of Greek speculation.”

- 7 In 1944, Columbia University Press published a collection of essays edited by Yervant Krikorian under the title, *Naturalism and the Human Spirit*. Most of the contributors in that volume were associated with the department of philosophy at Columbia. It represented the culmination of nearly 40 years of work at Columbia and was a clear expression of their brand of naturalistic philosophy.
- 8 This has led to many of Dewey’s critics, and some of his admirers, to the mistaken conclusion that the aim of his theory of inquiry was to give a complete logic of science in a vein similar to that of the positivists. However, he admitted in the preface of *Logic* that this account “does not have and could not have the finish and completeness that are theoretically possible” (1938, p. 5). Yet, he was convinced that it was “so thoroughly sound” that anyone who entertained it would “develop a theory of logic that is in thorough accord with all the best authenticated methods of attaining knowledge” (p. 5).
- 9 Thus, by itself, the kinds of rudimentary inquiry which extend out from non-cognitive experience, namely “valuations,” do not provide the habits of deciding between simple conclusions such as “phlogiston” or “opium’s dormative powers” against more complex explanations such as “combining oxygen with a combustible” or “a chemical reaction in the brain.”
- 10 Although growth involves the transformation of the indeterminate to the determinate, this should not suggest once this transformation has taken place that growth has ended. This is why Dewey repeatedly warned against interpreting his “consummatory” experience as a break in the continuity of experience.
- 11 There is not room here for a proper treatment of the many criticisms Dewey’s theory of inquiry has received since its inception. For such an account, one should turn to James Scott Johnston’s *Inquiry and Education: John Dewey and the Quest for Democracy* (2006b). Though his interest in Deweyan inquiry is mainly in the realm of philosophy of education, his second chapter gives an excellent overview of the historic and present-day debates surrounding inquiry.

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