Dewey’s Dynamic Integration of Vygotsky and Piaget

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Abstract
Contrary to the assumptions of those who pair Dewey and Piaget based on progressivism’s recent history, Dewey shared broader concerns with Vygotsky (whose work he never read). Both Dewey and Vygotsky emphasized the role of cultural forms and meanings in perpetuating higher forms of human thought, whereas Piaget focused on the role played by logical and mathematical reasoning. On the other hand, with Piaget, Dewey emphasized the nurture of independent reasoning central to the liberal Protestant heritage the two men shared. Indeed, Dewey’s broad theorizing of democracy’s implications for schooling can be seen to integrate the research emphases of the two psychologists.

Introduction
It has become a fashion among some to oppose progressive educational theory, associated with the scholarship of Dewey and Piaget, with a concern for the pedagogical perpetuation of cultural forms and understandings, currently emphasized by those working within the Vygotskian tradition. Kieran Egan’s (2002) recent critique of progressivism may provide the boldest iteration of such reasoning, yet related arguments can be found elsewhere (see, e.g., Kozulin, 1998). In other academic quarters, scholars debate what of Dewey might be claimed as support for a sociocultural tradition that proceeds primarily in Vygotsky’s name (see, e.g., Glassman, 2001, pp. 3-14; 2002, pp. 16-20; O’Brien, 2002, pp. 16-20; Prawat, 2002, pp. 16-20).

These contrasting debates are by no means arcane or irrelevant to languishing issues of school reform. Cogent analysis of the intersections between the scholarship of Dewey, Vygotsky, and Piaget promises to inform a set of issues that lies at the very heart of democratic learning and curriculum theory. In
particular, Dewey, a philosopher attuned to the contributions of psychology, can help educators in their ongoing struggles to theorize the practical implications of Vygotsky and Piaget for democratic classrooms.

Though often misinterpreted in this regard, Dewey’s work deftly negotiates a defining democratic tension between the need to perpetuate established cultural forms and understandings, on the one hand, and the need to foster diverse and novel ideas and perspectives, on the other. As I discuss below, this tension underpins Dewey’s central insights about how to build a democratic nation from diverse peoples. For Dewey held that the children of democracies must be apprenticed into collaborative meaning-making processes; they must be allowed to appropriate and reinvent, in terms that they can understand, the practical methods and processes currently in use within their wider society. Rote recapitulation of established material, then, could not even ensure students’ adequate mastery of essential cultural content and forms.

Piaget, in seeking to track the development of children’s thought, created a dynamic method capable of uncovering the evolving logics of a child’s reasoning (Mayer, 2005, pp. 362-382). Naturally, Piagetian findings regarding the distinctive perceptions and assumptions of children were widely seen as supporting established progressive arguments regarding the need for educators to attend to diverse perspectives. Impressed by Piaget’s project, Vygotsky responded with investigations into the ways in which existing cultural tools and understandings also necessarily challenge and structure children’s nascent thought (Vygotsky, 1986, pp. 12-57). Dewey, intent on explicating democracy’s implications for schooling, sought to synthesize most of the underlying philosophical and psychological concerns that shaped both lines of research.

Of the two psychologists, however, it was Vygotsky who grappled with the questions about the perpetuation and advancement of cultural forms that Dewey found central. Dewey and Vygotsky both sought to root a notion of cultural progress within the concrete realities of shared human purposes and social means: human meanings would deepen in a useful and rewarding manner as a function of profound cultural appropriation and renewal. Although the two men emphasized different aspects of this project, their shared attention to the role culture must play in advancing human understanding suggests the deep theoretical intersections that underlay their work.

These intersections are clearly evidenced in the attention that both theorists paid to the nature of learning and of education. Both Dewey and Vygotsky focused on the role of cultural activity in the elevation of human thought and looked to schools to engender an authentic appreciation of the methods and tools that they saw as integral to the work of building their changing nations—an increasingly diverse and industrial America and a postrevolutionary Soviet Union, respectively. Although Piaget did study the role that social interactions play in destabilizing narrow and naive reasoning, his research never focused on the influences of cultural forms per se.
Despite this significant distinction between Piaget’s project and the work of Dewey and Vygotsky, one must bear in mind the profound assumptions the three men shared. Although all three worked within different cultural milieus, each scholar questioned how children might be taught to think in new ways and so move beyond lockstep reenactment of the known. Each felt that the necessary quality of intellectual engagement could only be nurtured by giving children developmentally appropriate opportunities to make sense of their worlds in conversation with others.

As I have noted elsewhere, Dewey and Piaget were both raised as liberal Protestants: each emphasized the nurture of independent reasoning central to that heritage (Mayer 2006; see also Vidal 1987). As discussed here, Dewey and Vygotsky both pointed toward established cultural forms as the scaffolding upon which human reasoning must climb. Most fundamentally, however, all three theorists looked to the increased vitality and capacity of human intelligence as the only potential source of the social progress they all desired.

**Similarities between Dewey and Vygotsky**

Research on the psychological development of individuals has been interwoven with concerns over humanity’s prospects since psychology first organized itself into a discipline in Darwin’s tumultuous wake (Plotkin 2004; Richards 1987). Although this may seem a wide net to cast here, the careers of both Dewey and Vygotsky must be seen in relation to this early disciplinary interest in the links between individual development and social progress. Both scholars’ attention to educational method derived from a conviction that the proper nurture of children’s intellects would help to build the enlightened social and political orders that each believed his nation promised. Each therefore sought to theorize a new kind of teaching that could elevate the quality of thought of all, elevating the character of all cultural expression in turn.

These shared assumptions and purposes resulted from multiple mingled strains of influence, none more significant than that of Hegel. Well beyond the Darwinian backdrop, Dewey and Vygotsky shared enduring aspects of the Hegelian worldview. Whereas Piaget bound a faith in humanity’s forward momentum to the species’ evolved capacity for logic and math (Chapman, 1986, pp. 181-194), Dewey and Vygotsky bound their faith in a given society’s capacity for historical advancement to the efficacy and sensitivity of that society’s cultural resources. For both Dewey and Vygotsky, cultural advancement represented a more diffuse and complex affair and drew upon meanings of every kind.

Kozulin (1990) has identified three key aspects of Hegel’s influence on Vygotsky, all of which, I will argue, were shared by Dewey. First, though, it may be useful to remark on the divergent political traditions through which each scholar found his way to Hegel, as these traditions—Marxism and liberal democracy—are opposed in some regards and yet align in the ways that matter here.
Dewey rejected Marxism’s faith in historically determined processes and in the revolutionary potential of violent class struggle. As a young scholar, Dewey had shed his own fond attachments to absolutist storylines and had grown averse to their implications for social and political theory. Dewey’s radically democratic vision was rooted in the belief that any nation set on greater social equality must enlighten both capitalist and worker.

For Vygotsky, in contrast, the toppling of despotism in the name of humanity’s greater equality and fraternity had been ushered in by the political insights of Marx. The banner of Marx provided Vygotsky with a bright (albeit brief) moment of political possibility and with what Vygotsky may well have viewed as historical pretext for his grand overthrow of psychological reductionism. For the majority of the limited years in which Vygotsky worked as a research psychologist, the revolution had appeared to have arrived (Bruner, 1997, pp. 63-73).

Vygotsky’s thinking, however, drew deeply on Western psychological and philosophical traditions: fanatic and antihistoric party lines no more suited Vygotsky’s nuanced sensibility than Dewey’s. Indeed, Vygotsky was raised within a Jewish tradition of textual interpretation and later studied linguistics and literary theory amidst Russia’s cataclysmic transition from royal rule to socialist state. While such an upbringing may have fostered a more tolerant attitude toward Marxist doctrine, Vygotsky’s intellectual background did not lend itself to simple social prescription or to radical ideological impositions of any kind. Societies may be reborn, but only in relationship to cultural meanings that derive their value from historically rooted texts and traditions.

From within their disparate cultural contexts, then, both Dewey and Vygotsky studied their Hegel. Along with many others, both scholars found their hopes for an historical progression articulated there; in the company of a considerably fewer number, both then turned to the work of grounding those hopes in the material conditions of humanity. In Vygotsky’s case, he naturally traced this effort to Marx. In Dewey’s case, this effort was supported through his close personal and professional association with George Herbert Mead.

Unlike Dewey, Mead had spent several postgraduate years in Germany, studying with the famed psychologist Wilhelm Wundt. Germany was not only the intellectual epicenter of experimental psychology at the time, but also of post-Hegelian thought; and Mead became interested in the social theory of one of Marx’s contemporaries, Ferdinand Lassalle. Mead was to extend Wundt’s attention to the communicative implications of gesture into a social theory of consciousness that served Dewey’s purposes beautifully (Scheffler, 1974).

Individual identities, Mead proposed, were entirely shaped by interpersonal interactions and the signs—and sign systems, such as language—that made communication possible. Hegel’s notion that social institutions represented an ideal mind could be replaced then by the pragmatic notion that mind itself emerges from the material negotiations that comprise social interaction. Dewey found Mead’s work
so compelling that he eventually ceded the psychological field to his friend: He felt he would be able to gather all he needed from Mead’s social psychology.\textsuperscript{7}

Hegel’s texts are vast, complex, and arguably indeterminate in even their central meanings (Bencivenga, 2000; Desmond, 1992; Olson, 1992). Yet Dewey and Vygotsky held to several related themes within Hegel, Dewey through the lens of Mead, Vygotsky of Marx. Below, I consider the three Hegelian influences on Vygotsky that Kozulin identified relative first to Dewey and then to Vygotsky (Kozulin, 1990, p. 18):

- The historical nature of the human being;
- The role of work and the notion of “psychological tools”;
- The Hegelian dialectic of Becoming.

\textit{The historical nature of the human being}

Dewey sought to position all of his philosophical premises and pedagogical claims within the historic sweep of human culture and, more immediately, within the narrative of Western civilization. At the most basic level of consideration, human history provided the grounds from which Dewey wrested the central tenets of his philosophy of knowledge.

Man who lives in a world of hazards is compelled to seek for security. He has sought to attain it in two ways. One of them began with an attempt to propitiate the powers which environ him and determine his destiny. . . . The other course is to invent arts and by their means turn the powers of nature to account; man constructs a fortress out of the very conditions and forces which threaten him. He builds shelters, weaves garments, makes flame his friend instead of his enemy, and grows into the complicated arts of associated living. (1929/1960, p. 3)

Dewey also identified a specific range of intellectual possibilities that had been constructed by Western civilization and were therefore tied to the material conditions and cultural dynamics of the moment (1916/1944; 1920/1957). Dewey’s reasoning at both the more basic and this more proximate level helped to shape his diagnoses of and prescriptions for modern democratic societies and schools.

Just as theories of knowing that developed prior to the existence of scientific inquiry provide no pattern or model for a theory of knowing based upon the present actual conduct of inquiry, so the earlier systems reflect both pre-scientific views of the natural world and also the pre-technological state of industry and the pre-democratic state of politics of the period when their doctrines took form. (1920/1957, p. ix)

Vygotsky (1986) focused his historical lens on the evolving capacities of language and on the complex relationship between human thought and the sign systems that both enable and express that thought. Drawing upon the work of Köhler and other zoologically minded psychologists of the time, Vygotsky pursued the relation-
ship between thought and speech into both the earliest days of human civilization and into the first conscious phases of an individual’s psychological development.

Verbal thought is not an innate, natural form of behavior, but is determined by a historical-cultural process and has specific properties and laws that cannot be found in the natural forms of thought and speech. Once we acknowledge the historical character of verbal thought, we must consider it subject to all the premises of historical materialism, which are valid for any historical phenomenon in human society. (1986, pp. 94-95)

For both theorists, historic human conditions not only served to determine broad cultural possibilities: they also informed the work of schools in a direct manner. The dilemmas of one’s historical moment were a function of the tension between what one’s culture had adequately articulated and what now lay in wait just beyond the assurances of such understandings. Only children’s active appropriation of those shared understandings could provide the generative framework necessary for their minds to envision relevant new interpretations and possibilities.

One must also remember that, in broad terms, Vygotsky and Dewey did share in a particular historical moment within Western thought. Although Dewey did not read Vygotsky’s work (which had not yet been translated into English), he traveled to the Soviet Union in the 1920s, where schools were exploring the implications of Pragmatism in the nation’s early years. Dewey’s early works were among those being translated and published within Vygotsky’s milieu at this time (Cole, 1996). As Popkewitz has pointed out, although the narrative terms and images of their two cultures overlapped in some ways and differed in others, Dewey’s and Vygotsky’s practical visions for schools more or less aligned (1998, pp. 535-570).

The role of work and the notion of psychological tools

Dewey, Vygotsky, and their intellectual heirs in the field of education have all concerned themselves with the processes through which children come to appropriate the conceptual and material means of their cultures. Arguments in The School and Society, particularly the chapter on “The Psychology of Occupations,” establish the primacy of work as a civilizing force in Dewey’s mind.

It does not follow that all instincts are of equal value, or that we do not inherit many instincts which need transformation, rather than satisfaction, in order to be useful in life. But the instincts which find their conscious outlet and expression in occupation are bound to be of an exceedingly fundamental and permanent type. . .

However, these interests as [occupations] develop in the child not only recapitulate past important activities of the race, but reproduce those of the child’s present environment. . . . He comes in contact with facts that have no meaning, except in reference to them. Take these things out of
Dewey spoke of the individual’s “appropriation” of cultural tools and purposes, language closely associated with the Vygotskian tradition (Wertsch, 1998, p. 138). Though rooted in Dewey’s lifelong preoccupation with democratic political forms, Dewey’s insistence that all citizens must lay claim to the means and purposes of cultural production clearly aligns with Marxist concerns regarding the dignity of work and the human need to identify with the results of one’s labor. As Dewey put it:

A society is a number of people held together because they are working along common lines, in a common spirit, and with reference to common aims. The common needs and aims demand a growing interchange of thought and growing unity of sympathetic feeling. The radical reason that the present school cannot organize itself as a natural social unit is because just this element of common and productive activity is absent. (1900 & 1902/1990, p. 14)

Dewey’s principal argument here is that the social dynamism needed to nurture a vibrant society’s aims and means must be kindled within schools. Lest I risk the impression, so frequently gathered from cursory readings of Dewey, that Dewey cared more about spirit than tools, however, I cite at some length below from The Child and the Curriculum, Dewey’s most explicit rebuttal to such misreadings. For Dewey, common spirit could only live as a function of common understandings and methods.

On the face of it, the various studies, arithmetic, geography, language, botany, etc., are themselves experience—they are that of the race. They embody the cumulative outcome of the efforts, the strivings, and the successes of the human race generation after generation. They present this, not as a mere accumulation, not as a miscellaneous heap of separate bits of experience, but in some organized and systematized way—that is, as reflectively formulated.

Hence, the facts and truths that enter into the child’s present experience, and those contained in the subject-matter of studies are the initial and final terms of one reality. To oppose one to the other is to oppose the infancy and maturity of the same growing life: it is to set the moving tendency and the final result of the same process over against each other; it is to hold that the nature and the destiny of the child war with each other. (1900 & 1902/1990, p. 190)

Dewey is speaking here—in general terms—about what Vygotsky termed “scientific” and “spontaneous” concepts. The “facts and truths . . . contained in the
subject-matter of studies,” which Dewey claims represent the child’s “destiny,” are, in Vygotsky’s language, “scientific concepts.” The “truths that enter into the child’s present experience” result from a child’s spontaneous thought, the course of which Piaget strove to document. Below, Vygotsky speaks of the organizing influences of what Dewey calls “reflectively formulated” knowledge above.

School instruction induces the generalizing kind of perception and thus plays a decisive role in making the child conscious of his own mental processes. Scientific concepts, with their hierarchical system of interrelation, seem to be the medium within which awareness and mastery first develop, to be transferred later to other concepts and other areas of thought. Reflective consciousness comes to the child through the portals of scientific concepts. (1986, p. 171)

Vygotsky’s background in linguistics and in literary analysis set the stage for a lifelong preoccupation with the role words might play, not only in the psychological development of the young, but also in the liberation of humanity. From Marx’s general concern with the material means of labor—leading in Marx’s case to an analysis of industrial economic relations—Vygotsky identified language as the defining human tool, the one that supported the intersubjectivity that made abstract reflection itself possible (Wertsch, 1985). Consequently, and though the influences of Marx and Hegel on Vygotsky are often cited in one breath, Vygotsky can most often be seen moving through Marx to Hegel—and to Hegel’s concern with concepts—in his major works (1978; 1986).

For example, Vygotsky ends his final work, *Thought and Language*, with discussion of several excerpts from plays and poetry and with this mention of Hegel:

The relation between thought and word is a living process; thought is born through words. A word devoid of thought is a dead thing:

... and like bees in the deserted hive  
The dead words have a rotten smell.  
N. Gumilev

But thought that fails to realize itself in words also remains a “Stygian shadow” [O. Mandelstam]. Hegel considered word as a Being animated by thought. This Being is absolutely essential for our thinking. (1986, p. 255)

Vygotsky’s inspired project was to study the development of this Being and the play of its possibilities in the world. Ironically, between Dewey and Vygotsky, the Marxist psychologist arguably proves the more poetic of the two. For although both Vygotsky’s focus on semiotics and shared meanings and Dewey’s focus on experience and shared purposes were rooted in the realities of human activity, Dewey’s focus can be seen to represent the more elemental and, indeed, the more material set of concerns.
The Hegelian dialectic of Becoming

Kozulin also finds Hegelian influence in Vygotsky’s commitment to studying learning and development as processes rather than as a series of discrete performances or static states. In considering this claim, one needs to recall that both Dewey and Piaget shared this commitment and that process-oriented models and methods have multiple sources in psychology and in the Western intellectual tradition more generally. Particularly after Darwin, traditional philosophical questions regarding human means and purposes came to be cast in terms of biological and evolutionary processes (Persons, 1950; Richards, 1987).

Certainly, though, Hegel’s scholarship continued to play a formative role within these deliberations (Kojève, 1969). Given the care with which both Vygotsky and Dewey read Hegel, Hegel’s central notion of Becoming would have likely informed their sensibilities in this regard. Here is a sample of Hegel’s language on Becoming:

The readiest example is Becoming. Every one has a mental idea of Becoming, and will even allow that it is one idea: he will further allow that, when it is analysed, it involves the attribute of Being, and also what is the very reverse of Being, viz. Nothing: and that these two attributes lie undivided in the one idea: so that Becoming is the unity of Being and Nothing. (1873/1975, p. 130)

Although Dewey wrote less on learning science and its methods than did the two psychologists, he called for methods that could study learning as it unfolded (Dewey, 1928/1988; Mayer, 2007). Dewey understood that the static psychometric measures that loom so large within schools today could characterize little of what he sought when he spoke of the rewards of educational experience. He believed that meaningful educational experience, like all experience, is situated and relational; novel juxtapositions generate new qualities of coherence that shift and elevate one’s relationship with the world. Below, Dewey speaks of art as experience, but what he says applies in his mind to all true experiences, if not to all experience.

Because of continuous merging, there are no holes, mechanical junctions, and dead centers when we have an experience. There are pauses, places of rest, but they punctuate and define the quality of movement. They sum up what has been undergone and prevent its dissipation and idle evaporation. Continued acceleration is breathless and prevents parts from gaining distinction. In a work of art, different acts, episodes, occurrences melt and fuse into unity, and yet do not disappear and lose their own character as they do so— (1934/2005, p. 38)

With such language, Dewey strives to evoke a process that subsumes conceptual oppositions—including any absolute distinction between “inner” and “outer” reality—within a greater multidimensional whole. Garrison, in contrasting Dewey’s conceptualization of learning with that of Leont’ev (who advanced the Vygotskian research tradition after his mentor’s death) argues that Dewey’s theory of “trans-
action” actually goes further than Leont’ev’s in transcending the binary between knower and known (2001, pp. 275-296). Garrison quotes Vygotsky’s work, Mind in Society,14 in order to locate the origins of what he identifies as a continuing Vygotskian tendency to speak of two separate realities that must be mediated, rather than one continuous reality that might be analyzed in various ways in addressing differing purposes.15 Whether or not such differences of linguistic emphasis result primarily from the analytic demands of psychological research (Miettinen, 2001, pp. 297-308), Garrison’s discussion serves to elucidate Dewey’s apprehension of human experience as seamless and dynamic.

Both Dewey (1988) and Vygotsky (1986) also voiced reservations regarding the extent to which psychology could truly be considered a naturalistic science given science’s traditional emphases on immutable laws and static formulas. For both scholars, the study of learning and development entailed methods that could move with a child’s emerging meanings and that could sensitively mediate between those meanings and an adult’s understandings.

While Dewey, as an educator, could call for the study of learning as it unfolded within the context of progressive schools, Vygotsky faced the challenge of inspiring learning within an experimental setting.

Our method may be called experimental-developmental in the sense that it artificially provokes or creates a process of psychological development. This approach is equally appropriate to the basic aim of dynamic analysis. If we replace object analysis by process analysis, then the basic task of research obviously becomes a reconstruction of each stage in the development of the process: the process must be turned back to its initial stages. (Vygotsky, 1978, pp. 61-62)

For both Dewey and Vygotsky, learning and development were interwoven with each other and the social and material worlds in complicated ways. This complexity did not suggest, however, that methodical studies of learning and development were not possible or necessary, quite to the contrary. The considerable challenges did imply, however, that imaginative methods would be required. Here Vygotsky sums up his introductory section on method in Mind in Society:

To study something historically means to study it in the process of change: that is the dialectical method’s basic demand. To encompass in research the process of a given thing’s development in all its phases and changes – from birth to death – fundamentally means to discover its nature, its essence, for “it is only in movement that a body shows what it is.” Thus the historical study of behavior is not an auxiliary aspect of theoretical study, but rather forms its very base. (1978, pp. 64-65)

**Dewey as mediator between Vygotsky and Piaget**

The disciplinary differences between Dewey’s role as a philosopher and Vygotsky’s and Piaget’s roles as psychologists naturally position Dewey as a potential synthe-
sizer of the others’ scholarship. Although Vygotsky was more the sweeping theorist and less the exacting experimentalist than Piaget, he nonetheless placed his work in conversation with that of Piaget and other developmental researchers, framing the empirical studies that would speak to that world. The time-consuming research that supports scientific theorizing naturally narrows the scope of scientific debate; especially fertile lines of investigation, such as Piaget’s, can consume entire careers.

In reflecting on the integrative possibilities of Dewey’s vision, it is useful to revisit the organizing purposes of each scholar’s project. Again, Piaget sought to explore the ways in which children, in reckoning with material realities, come to construct logical and mathematical reasoning over time. The observation of his close colleague, Bärbel Inhelder, that Piaget was “a zoologist by training, an epistemologist by vocation and a logician by method” well conveys not only the principal dynamics of Piaget’s work but also their disciplinary origins.

Of the three theorists, only Piaget drew on Neo-Platonic notions of a transcendent rationality: his œuvre places great store in the transformative potential of a socially mediated, biologically grounded propensity to discover logical and mathematical forms. In Piaget’s view, Western culture was now capable of moving beyond centuries of unconsidered adherence to inherited myths and assumptions and in relation, instead, to a transparent rationality capable of imagining and enacting the greatest good for the greatest number. Although Dewey and Vygotsky shared related hopes, neither of them placed formal logic and mathematical reasoning in so pivotal a role.

In responding to Piaget’s project, Vygotsky objected to Piaget’s exclusion of the cultural dimension of a child’s learning and development, questioning how one could fully appreciate what a child might understand of the world in the absence of a sustained pedagogical interaction. Vygotsky argued that all human thought and speech necessarily implicate language and other cultural tools; a nuanced attention to how children make use of such cultural forms must be involved, then, in any comprehensive attempt to apprehend the nature of their reasoning (1986, pp. 12-57).

As a Russian scholar who lived to witness Soviet dominion over any number of traditional rural societies, Vygotsky looked to modern Western education to develop more sophisticated forms of thought among these new citizenries. At the same time, Vygotsky certainly expected that Western thought would continue to evolve as a function of ongoing scientific advancements, such as his own and those of his colleagues. Interestingly, it was Vygotsky and Piaget who shared untroubled assumptions regarding the natural links between what they saw as the predictable forward momentum of Western science and the broader forward momentum, therefore, of Western understanding.

Dewey, in contrast, interrogated the relationship between science, art, and morality in modern times, identifying aesthetic and philosophical insight as the ultimate expression of a society’s worth. Whereas for Vygotsky, “scientific” thought more or less represented the integrated forward movement of modern
rationality, for Dewey, a culture’s inherited assumptions and values needed to be continually examined and reborn in relation to a culture’s ever more sensitive scientific understandings. If Piaget under-theorized the role cultural resources play in formulating human thought, then, Vygotsky can be charged with under-theorizing the inherent tension between established cultural means and the new and divergent thinking that drives any intellectually open society.

As intellectual inheritors of the Enlightenment rift between free scientific exploration and the dictates of Rome, both Dewey and Piaget were culturally inclined to recognize scientific demonstration and logical reasoning as essential to the struggle against intellectual and political tyrannies of any order. The work of both scholars can usefully be seen, therefore, as moving in opposition to an unreflective appropriation of inherited understandings; at the same time, one must note that Dewey and Piaget took decidedly different tacks in this regard.

Piaget stressed the sensitive nurture of children’s developing logical capacity because he believed that by respecting the integrity of children’s distinctive thinking one would maximize one’s chances of acculturating children to the cultural tradition that mattered most—an interest in and ability to reason logically (see Chapman, 1986). Dewey, on the other hand, had identified lived experience—with its embedded historical, developmental, and cultural contingencies—as the organizing framework for all human understanding. Although he insisted that inherited assumptions must be reexamined in relation to contemporary understandings, Dewey (1934/2005) did not believe that all that mattered could be articulated in propositional, let alone formal logical, terms.

In two central aspects, then, Dewey’s scholarship can be seen to integrate the orientations of Vygotsky and Piaget. In insisting on the necessary role of science in the ultimate fashioning of a democratic culture’s aesthetic and philosophical vision, Dewey can be seen as placing a Piagetian focus on logical and mathematical reasoning into an active relationship with Vygotsky’s emphasis on the necessary (and inescapable) contributions of inherited cultural understandings and methods. In framing lived human experience as the basis for all consideration of human meaning, Dewey engages both the exigencies of individual sensibility and the demands of social context.

Again, Dewey found that the people of a democratic nation, in addition to sharing a set of political arrangements, must share a broad array of methods and aims; they must appreciate the rewards and demands of collaborative efforts of many kinds. For Dewey, a particular quality of intellectual involvement with one’s world represented both the necessary means and exalted purpose of democracy as a social and political form. It is no accident, then, that Dewey’s work provides a synthesizing lens for the work of Vygotsky and Piaget, two psychologists whose research suggests new approaches to fostering children’s cultural literacy and analytic clarity, respectively.
Implications for Contemporary Education Practice

As I have argued, Dewey’s insight regarding the organizing social influences of shared means and purposes generated a vision of education that was always at least as much about students’ appropriation of cultural methods and understandings as it was about the development of students’ critical sensibility. Dewey (1900 & 1902/1990) never imagined that one might replace the other, as much as the balance between them may well shift within various disciplinary and developmental contexts. Students’ powers of independent observation, analysis, and theorizing were to be honed within the crucibles of key cultural production and democratic knowledge construction processes.

Current progressive educational practice can generally be seen to embrace this very balance, although the role of cultural forms can remain under-theorized, particularly within work that emerges most directly from the Piagetian tradition.21 Under-theorized or not, however, essential cultural tools remain reliably in place; Piagetian experiments, and their accompanying paraphernalia, continue to fill investigatory math and science curricula. Piaget’s method of engaging children’s thinking has now also been adapted to other disciplines. As work inspired by learning theorist Eleanor Duckworth’s (1996; 2001) adaptation of Piagetian method to pedagogical purposes has demonstrated, attention to students’ meaning-making can uncover not only developmental, but also cultural and individual differences in conceptual framing.

Contemporary interest in Vygotsky’s work, set against the more established influences of Piagetian theory, has encouraged educators to consider the tension between an individual and his or her cultural context that Dewey’s notion of lived experience subsumes. Sociocultural research and theory has supported educators in articulating the fundamental disciplinary assumptions and methods that democratic citizens must appreciate if they are to take part in the social, intellectual, and political negotiations of the day. In addition, sociocultural scholarship has begun to theorize the pedagogical processes whereby students come to appropriate such assumptions and methods (see, e.g., Lemke, 1990; Kozulin, 1998). All of this work offers a necessary corrective to the field’s current preoccupation with thin performance measures and suggests ways of moving beyond the disciplinary uncertainty that has made so extreme an over-reliance on psychometric test scores possible.

Naturally, Dewey’s practical curricular interpretations of his work could be spare in places (or, at this point, dated); a scholar interested in outlines that broad will delve only so far into specifics over even a long career (though surely Dewey went further in this direction than most philosophers).22 Howard Gardner, in a useful discussion of the ways in which later developments in learning science have informed progressive educational commitments, reminds us that anachronistic criticisms of early progressive theorizing are unfair (1991, pp. 195-199). I have further argued that the historically insensitive analyses that generate such anachronisms risk derailing needed theoretical syntheses.
Conclusion

As we have seen, both Dewey and Vygotsky looked to schools to acculturate the young of their societies into a system of methods and meanings that the children might adapt to their future needs and purposes. Both scholars spoke of their societies as driven by newly emergent material forces and saw the fostering of a critical and informed intelligence within their citizenries as the best assurance that unforeseen challenges might be adequately met by future generations. Both believed that such an education was essential to the development of more just and more enlightened societies.

Although Dewey and Vygotsky both stressed the role of established cultural forms in elevating the condition of their societies, both men also emphasized that children must be taught to claim such means through an active social engagement that provides connections between these forms and the child’s worldview. Here, Piaget joins their ranks. Vygotsky and Dewey may have shared more organizing commitments, but Piaget basically agreed with them regarding the implications of developmental learning theory for school practice.

Dewey, Vygotsky, and Piaget all saw reason and culture as informing each other in necessary ways and as advancing together. Piaget’s research into developmental constraints helped to frame Vygotsky’s subsequent attention to semiotic mediation. Against the dynamic relationship generated by these two sets of contrasting research priorities, Dewey constructed a synthesizing philosophical frame.

Educational theorists detract from this emerging coherence when they emphasize the differences between any two of these theorists to the near exclusion of their shared concerns. Given that Dewey, Vygotsky, and Piaget all sought to transcend the parochialisms of the differing psychological orientations of their day, it seems particularly inappropriate to contrast any two of these scholars based primarily upon their immediate historical circumstances. Although there seems to be no evidence that Dewey, Vygotsky, and Piaget were in direct conversation with each other, they were all in conversation with a particular period of human history and with longstanding philosophical and psychological issues rooted in the Western philosophical and psychological traditions that they shared.

Together, then, the scholarship of these three major theorists underwrites the twentieth century turn toward the study of the ways and means of human intelligence as a basis for pedagogical forms and towards the honing and acculturation of a critical human sensibility as the defining goal of a free and fair educational system. All three have advanced the work of engaging children’s creative capacities as a means of initiating them into the complex work of collaboratively making sense of the world. In particular, John Dewey, philosopher of democracy, framed a new form of pedagogical relationship that continues to demand greater elaboration and emphasis within his nation’s ostensibly free and fair schools.
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Notes

1. An earlier draft of this paper was presented at AERA 2007.
2. Piaget, 1923/1959. This first psychological text of Piaget’s explicitly explores social influences on children’s thought, an interest to which Piaget returned periodically, particularly toward the end of his career.
5. In contrast, Marx, though Jewish by ancestry, was raised as a nominal Lutheran by his father, who had converted for political reasons from what appears to have been a similarly nominal Judaism. One can imagine that Marx’s appreciation of German idealism owed something to this upbringing. As had Hegel, Marx lived under a socially and politically oppressive Prussian monarchy and would wait in vain for the Prussian state to implode in accordance with his theory. Singer, 2000.
7. Ryan, 1995. The parallels with Vygotsky’s work are striking, raising questions as to the influences of Wundt’s work on Vygotsky.
9. That Vygotsky meant to reference more than the mathematical and scientific understandings Piaget studied with his term “scientific” was evidenced by Vygotsky’s investigative accomplishments and ambitions—to study the comprehension of narrative line, for example, or the development of concepts such as “exploitation.” Vygotsky, 1986, p.162; see also Daniels, 2001. Vygotsky’s use of the term “scientific” likely derives from Hegel’s and Marx’s use of the term to reference systematic conceptual analysis (see Singer, 2000).
10. This is not to suggest that Dewey neglected the organizing role of language. Jim Garrison (2001) quotes Dewey as speaking of mind as “an added property assumed by a feeling creature, when it reaches that organized interaction with other living creature which is language, communication” (pp. 292-293).
11. In speaking of Hegel’s dialectic of Becoming, Kozulin does not necessarily reference either dialectical materialism or the Hegelian idealism that helped spur Marxist utopianism. Rather, Kozulin seems to be suggesting that Vygotsky sought to study the movement that results from the play of conceptual oppositions that distinguishes Hegelian dialectical process. In a similar manner, Dewey’s attention to transcending dualisms can be traced to a concern with dialectic process, though Dewey renounced transcendent ideals as a dialectical process’s ultimate outcome.
the distinctions between the developmental stages Piaget theorized, Piaget actually saw the evolution of logical reasoning processes as a continuous process.

13. For example, Kozulin may also be evoking Vygotsky’s interest in the dialectical process as the source of self-consciousness, a concern that can be traced to Hegel (Kojève, 1969) and which Dewey shared.

14. Vygotsky’s well known formulation was, “An operation that initially represents an external activity is reconstructed and begins to occur internally,” Vygotsky, 1978, pp. 55-57.

15. As Garrison (2001) puts it, “Transactional thinking allows us to see things as belonging together functionally, such as lungs and oxygen producing flora that are usually never connected. Transactionalism allows us to recognize them as subfunctions of a larger function” (p. 286). In other words, the subject and object categories are themselves infinitely malleable and can be constructed in whatever manner might address particular aims.

16. Piaget’s hope was that this work would inform the question of how human reason had evolved.

17. Cited in Smith, 1998, pp. 201-219. In reflecting upon this triumvirate of disciplinary influences, contemporary educators are likely to mark the absence of a cultural lens.


19. On Dewey’s vision of the necessary role of science in a democracy, again see Mayer, 2007.

20. Certainly, Piaget’s attachment to logico-mathematical thought must be seen as more extreme, and in that sense less balanced, than Vygotsky’s broader concern with what he did term, after all, “scientific” language. As we have seen, for Vygotsky, “scientific” language referred to concepts that had been abstracted through established processes of cultural articulation.

21. Kamii, 1994. Kamii, for example, published a series on the practical application of Piaget’s work within mathematics classroom that arguably under-theorizes the role established cultural tools play in this approach.

22. This breadth of vision passed out of fashion within Dewey’s lifetime. See Westbrook, 1991, pp. 537-552.

23. Although Piaget generally hesitated to speculate on the implications of his work for school practice, he is said to have offered Dewey’s work as exemplary.

References


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