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A Cartesian Education

Jacques Maritan writes:

> THE EDUCATIONAL TASK IS BOTH GREATER AND MORE MYSTERIOUS AND, IN A SENSE, HUMBLER THAN MANY IMAGINE. IF THE AIM OF EDUCATION IS THE HELPING AND GUIDING OF MAN TOWARD HIS OWN HUMAN ACHIEVEMENT, EDUCATION CANNOT ESCAPE THE PROBLEMS AND ENTANGLEMENTS OF PHILOSOPHY, FOR IT SUPPOSES BY ITS VERY NATURE A PHILOSOPHY OF MAN, AND FROM THE OUTSET IT IS OBLIGED TO ANSWER THE QUESTION: 'WHAT IS MAN?' WHICH THE PHILOSOPHICAL SPHINX IS ASKING.[1]

When philosophy comes to be seen as anathema to education, then the question of "man," and the implication of any answer, fails to be explored and understood; insofar as any such philosophy is necessary yet unquestioned in education, the entire endeavor fails to be grounded and proceeds blindly. What if in our educational institutions we denounce any historically authoritative answer to the philosophical question concerning human existence, and then justify this attitude with the alibi of respecting liberal freedoms? That is, what if we reject the possibility of any answer to the question of human nature while allowing each individual her own idea of what human nature is? How could this be so if, as Maritan writes, a philosophy of man is presupposed by the very nature of education? Perhaps a hidden and particular philosophy of human nature pervades the background of our educational institutions, as well as our thinking—one that hides itself within our relativistic denouncement of any authoritative answer to this question. Surely some assumed nature of man must lead one to hold that any answer is relative: because man is such (X), there can be no truthful answer to the question. So, what is the 'X'—the philosophy of man assumed in our contemporary circumstance? We shall see, hopefully, and contend that our educational institutions, conceptions of education, and our very thinking about what 'learning' is, are all guided by a dualistic, Cartesian philosophy of man. While this subject-object (scientific) perspective may provide "information" and "tools" for education, it seems that a vital element of education goes missing—

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From Jacques Maritan's *Education at the Crossroads* (New Haven: Yale University Press, 1943) pp 47; found in William K. Frankena's Philosophy of Education (Macmillan Company, New York, 1965) "Man's Nature and the Aims of His Education,"

properly situating the student's self within the world around them. Perhaps by allowing our assumptions to become explicit, be challenged and expanded, we may reconceive education such that perspectives beyond the Cartesian frame of mind can enrich our educational experiences—ones that will, hopefully, be better able to care for the self by properly situating it within society.

This notion, that our current educational activities fail to properly care for the self, might seem to contradict our very thinking of what education is: the advancing and improving of an individual's knowledge, cognitive and physical and technical capacities, skills, etc. Yet, this seeming contradiction must assume a particular view of the self (and philosophy of man) in order to be seen—the self must be somehow situated within our view of the world for us to define education along the terms of such improvement. If we look at our ideas of the self, we tend to find the self as something obviously within (or dependent on) the mind; in turn we view the mind as within (and dependent on) the brain: thus, we think, the self is within the brain. We come to view improving the self in terms of improving the functions of the brain (e.g. processing, recognition, memory, connections, etc.). This 'obvious' picture is valid: without the brain there is no mind! But perhaps there is a less obvious danger in reducing 'man', and activities such as education and learning, strictly to this relationship. Meaning, if we reduce the care of the self to the sharpening of brain function, then we may become unaware of other, vital elements to such care.

The need for such a reduction, once again, stems from holding a dualistic, Cartesian philosophy of human nature. This conception of man is not necessarily one completely espoused by René Descartes himself, as he did not reduce the mind (res cogitans) to the brain (res extensa)—he kept them ontologically separate; yet, the implications and corollary notions of Descartes' dualistic thinking remained through the historically developed philosophy of human nature prevalent in our contemporary circumstance. Namely, that 'I' and the world/environment are essentially separated—I am 'in' my brain, interacting with the world outside of my brain through sensory mediums: optical, auditory, tactile, and olfactory senses...these are the channels between me (the 'I' in the brain) and the world (something completely outside of and opposed to my mind). How physical phenomena transduce into mental ("what its like to...") phenomena remains a mystery, and in light of this mystery, I believe people are wont to entirely reduce every aspect of 'mind' exclusively to the scientific knowledge of the 'brain'.

While it seems evident that scientific knowledge of the brain is necessary for understanding the complexity of our consciousness, it is not sufficient. This notion goes largely unquestioned and becomes problematic when we strictly and exclusively oppose the mindinbrain with the worldoutsideofbrain. This understanding of human consciousness ignores other minds (an intersubjective dimension), the environment (where the physical environment guides the social, which in turn reshapes the physical, and so on), and certain structures in the world (perhaps language, history, and/or technology); but these features and structures

seem necessary for any human consciousness (or self) to emerge—it is impossible to conceive of a consciousness without these. If we admit this, then we may dub these features and structures ‘constitutive’ of consciousness. To take this thesis to heart is to claim that consciousness (and my self) is not essentially separated from structures outside my brain; consciousness is not ‘exclusively realized’ by the brain itself, but it is partially realized by the world outside of the brain. This thesis is contradictory to the Cartesian picture: that is, that mind, self, and consciousness are entirely dependent on and exclusively realized by neuronal activity inside of the brain. The alien feeling of thinking other than the Cartesian picture is a testament to the prevalence of the picture itself—the public consciousness conceives of mind as being fundamentally explained by neuroscience alone. Even ‘empirically responsible’ psychology must aim to not contradict the Cartesian picture (and the resulting ontological reduction of ‘mind’ to ‘brain’) and always be aware of a way to tie psychological research ‘down to’ neuroscientific evidence. However, it is suggestive to conceive of consciousness as essentially dependent upon structures outside of the brain (e.g. the body, environment, action, etc.) and/or world features (e.g. language, history, technology, etc.). There cannot be a freefloating consciousness, conscious only of itself and its subjective world.

Of course, all of this discussion warrants dedication and understanding, and an imagination as to what may be wrong about the way we conceive of the mind, the self, and consciousness. Such research and inspiration is evident in philosophers such as Martin Heidegger, Maurice Merleau-Ponty, Kitarō Nishida, and Michel Foucault; also Hubert Dreyfus, Alva Noë, Susan Hurley, and Mark Rowlands; there are also movements to pursue nonCartesian, nondualistic cognitive science and psychology (e.g. embedded, embodied, enactive, and extended approaches to mind). Regardless, fully explicating or developing any position in this domain remains beyond the scope of this essay; because, now, we must ask ourselves: “What could any of this have to do with education?”

Resting upon the Cartesian assumption, that the mindsinourbrains are essentially divorced from the worldoutsideourbrains, separates the student from the world—they become isolated minds dwelling only within their own skulls, and their only intimacy or connection with the world (including their teachers and peers) is through a system of rules and representations occurring off of sensory ‘input’. We conceive of the human mind as the CPU inside of the brainhardware which controls the inputoutput functions of the totality of cognition; our eyes are like cameras, ears are like microphones, all which send ‘input data’ or information to the visual/auditory processing modules of the brain (the video and sound cards). This incredibly Cartesian and machinic picture reduces the self to a structure internal to all of these functions; it whittles down the self to the confines of ‘cognitive processing’ and so prohibits any substantial development outside of the objectively, scientifically defined sense of self. (Even the noself doctrine, as posited by the Buddha and supported by some neuroscientists, must be a notion that enriches our interaction

with the world: in short, we might better care for the self by learning that there is no self! This nonCartesian picture may enrich our interactions as long as it is philosophically understood.) These reductionist perspectives, however, do bear truthfulness. Light does enter the eye and allow vision, air vibrations do disperse and reverberate our eardrums for sound—but, we cannot rest upon the claim that such scientific knowledge ultimately gives us the entire TRUTH, nor that nothing useful can be thought beyond the realm of scientific knowledge of human nature. Entertaining merely this scientific view of man fails to ground an education that concerns itself with the care of the self; as Maritan writes:

> Now it is obvious that the purely scientific idea of man can provide us with invaluable and evergrowing information concerning the means and tools of education, but by itself it can neither primarily found nor primarily guide education, for education needs primarily to know what man is, what is the nature of man and the scale of values it essentially involves; and the purely scientific idea of man, because it ignores 'beingassuch', does not know such things, but only what emerges from the human being in the realm of sense observation and measurement...[2]

Expanding out of our overly scientific view of education is not simply remedied by a revitalization of the arts and humanities—though, a sense of this is necessary,—for the arts and humanities remain stripped of their humanistic value as long as the dualistic, Cartesian philosophy of man underlies their study.

If this is the general philosophy of man that we entertain in our thinking, then the thinking behind any educational activity is grounded upon a view that essentially separates the mind/self, which is presumably the thing being educated, from the world/environment that one must become educated about and ready to dwell within. This does not imply a solution by way of the education of entirely practical matters, though, again, a sense of this is necessary, but by way of revealing the student's cultural, historical, and philosophical 'situatedness': which means leading a student to an insight concerning what led to and how it came to be that we may think whatever we think (which, in turn, will foster greater practical knowledge). This includes educating a student about the history of ideas and how we arrived at this juncture: what led to our current conceptions of the self; how our contemporary thinking about the world still follows Cartesian thought; and about the fact that our objective knowledge of the mind/brain is powerful, but, nevertheless, relies on particular assumptions about the world. Such questioning and education leads a student to understand their own place in history, in society, and how it all came to be this way. Understanding what conditions throughout history have led to the present moment simultaneously offers students glimpses into the different worlds that humankind has constructed (i.e. how different epochs encountered reality and how those encounters organized life within civilizations). This depth of understanding allows the student to better imagine what the future might, could, and should be like: the students' imagination and creativity concerning present issues and their solutions becomes expanded through exposure to the evolution of different (heterogeneous) ideas throughout history.

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For a view of these non-Cartesian approaches, check out Mark Rowland's *The New Science of the Mind: From Extended Mind to Embodied Phenomenology* (Bradford Books, 2013).

The issue at hand is our model of thinking and learning as the receiving of information from 'outside' of the brain through sensorychannels into a separated and independent self 'inside' of the brain. Under this subject-object model, every educational endeavor is decontextualized and reduced to bare senderreceiver relationships; it frames the endeavor by conceiving of knowledge (or, the 'known') as a static, neutral 'bit' of information 'out there' that is to be received by a different entity 'in here' (the 'knower'). This model reveals a functional relationship between the student and teacher, but conceals a great deal of what has always been cherished in education and mentorship: a transformation of the student's self that is evident in their goingabout in the world—this is fostered by understanding connections beyond what the Cartesian frame allows. This kind of understanding cannot be communicated through bits of information, but requires a particular kind of intersubjective relationship with a teacher (thus, online education will always fail to foster such transformations). Only in such relationships may learning foster a proper care for the student. Unfortunately, however, the dualism we are possessed with recasts not only what 'learning' is, but also what is to be learned.

History becomes a chronological system of accruing facts that are causally related in time and demand some archaeological evidence for any claim to objectivity—or else, any historical claim void of such evidence becomes a subjective opinion originating within some historian's mind. Any such claim fails to gain significance because that historian's mind is inherently disconnected from the world and requires objective data through the sensory mediums to secure any significance. Historically situating a student within their own context, under this model, is to merely facilitate a knowledge of dates, names, and events, and the rest is up to the students' cognitive capacities to realize any significance. I suspect most history teachers do not wish to conceive of history in such a way; but when students, parents, and other faculty members hold to such a conception, this ultimately limits a history teacher's ability to impart a truthful, historical insight into why things may be the way they are today. "We learn history so we do not repeat it" has lost any meaning in light of the Cartesian philosophy of man because it reinforces the notion of history as a dead set of information that we load into our 'memory banks' to improve our behavioral output. Perhaps it is, now, more enlightening to say: "We must learn history to learn that we are a reiteration of it."[3] We are not historically-isolated beings, but are cast with a connection to something 'eternal' in history. We are not freefloating minds plopped down into history, but we are historicallyconditioned beings created with history: learning one's own place in history is learning the conditions of one's own consciousness. John Dewey in Democracy and Education describes our attitude to the subject of history:

The segregation which kills the vitality of history is [the] divorce [of history] from present modes and concerns of social life. The past just as past is no longer our affair. If it were wholly gone and done with, is there would [indeed] be only one reasonable attitude toward it. Let the dead

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From Jacques Maritan ibid; found in William K. Frankena's *Philosophy of Education* (Macmillan Company, New York, 1965) "Man's Nature and the Aims of His Education,"

bury their dead. But knowledge of the past is the key to understanding the present.[4]

And, as Alfred North Whitehead writes: "The present contains all that there is. It is holy ground; for it is the past, and it is the future."[5] It seems to be a reasonable standard for education to affect a person such that they understand how the problematics of their present circumstance developed out of, and in response to, past historical paradigms. Not only who came up with what, when, and why, but how it came to be that discovery drives individuals into a manic frenzy about something that is invisible to the naked eye (e.g. an idea, a science, an artistic inspiration)—yet, is connected to something eternal within all of humanity (e.g. perennial questions and desires for knowledge).

Programs like the STEM initiative probably devalue any practical import of subjects like history to their endeavor (since STEM deals with knowledge concerning primarily the 'outside', whereas much of history deals with knowledge primarily concerning the 'inside'), yet, we may listen to a voice that reshaped the philosophy of science, and introduced the notion of 'paradigm' into common U.S. lexicon, Thomas Kuhn. He begins his essay, The Structure of Scientific Revolutions, with the following words:

History, if viewed as a repository for more than anecdote or chronology, could produce a decisive transformation in the image of science by which we are now possessed. That image has previously been drawn, even by scientists themselves, mainly from the study of finished scientific achievements as these are recorded in the classics and, more recently, in the textbooks from which each new scientific generation learns to practice its trade. Inevitably, however, the aim of such books is persuasive and pedagogic; a concept of science drawn from them is no more likely to fit the enterprise that produced them than an image of a national culture drawn from a tourist brochure or a language text. This essay attempts to show that we have been misled by them in fundamental ways. Its aim is a sketch of the quite different concept of science that can emerge from the historical record of the research activity itself.[6]

Thus, if our study of history proceeds along the Cartesian philosophy of human nature, and relies on a dualistic guide for what is to be learned and how, then such an historical education will fail to produce the "decisive transformation in the image of science" that Kuhn calls for. Divorcing consciousness from the world prohibits one from understanding how history, like science, "does not develop by the accumulation of individual discoveries and inventions." Learning and thinking about history in this way results in the lack of a student's historical situatedness, which is a failure to understand the present circumstance and their own position within it. A self that fails to understand (at least roughly) why and how the world that the self dwells within came to be, also fails to understand the historicity and problematics of the world around them; if this is the case following twelve or more years of education, then we may honestly say that the education failed to properly care for the student's self.

Not only must an education that properly cares for the self attempt to historically situate a student, but it must also impart to a student

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John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education* (The Free Press, New York, 1997), Page 214. (Originally published 1916).

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Alfred North Whitehead, *The Aims of Education and Other Essays* (The Free Press, New York, 1967), Essay #1, Page 2.

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Thomas S. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, Chicago, 1970), Page 1.

certain nuances of understanding the world around them....The self must interpret the world, but these interpretations are not merely and relatively of the world—every interpretation must draw from the world and is always grounded upon something beyond our individual, subjective opinions and assumptions. This is because the self relates to something 'eternal.' Though such a notion is alien to our scientific way of thinking, we must nonetheless admit that some form of understanding and empathy is universal to all of humanity; even if through suffering, there is a way by which every person may relate to one another in virtue of our connection to something 'eternal'—be it our genetic blueprint or the necessary tragedies of every human existence, regardless of their particular details. Awareness of such human dimensions opens up the chasm between reason and the emotions, and allows one to see how each may make one another and are not, after all, completely separate domains of the human mind. Being open to the connection between one's self and the rest of humanity allows the student the opportunity to appreciate the difference of what is necessary, and what is contingent. Certain losses are necessary, but the ways we deal with those losses are contingent; the fact we must interpret and make decisions is necessary, but the forms of our interpretations and decisions are contingent. Learning a responsible appreciation of all such differences underlies the student's ability to properly reap the fruit that education hopes to sow.

How to structure and conceive of an education that does properly care for the self is also, unfortunately, beyond the scope of this essay and warrants a worthy treatment; however, following the analysis presented thus far, we may perhaps begin to see how our current conceptions of education may fail to achieve such ends.Where we saw how our dualistic, Cartesian philosophy of human nature fails to provide an historical education that properly situates the student's self, such an analysis may be easily extended to other subjects to reveal how these conceptions of education and learning rob students of what education ought to provide.

While our educational institutions may escape the responsibilities of properly caring for the student's self by narrowing their efforts to the Cartesian conception of education, the demand to reconceive our conceptions of learning beyond the dualistic, Cartesian philosophy of human nature will undoubtedly provide the inspiration necessary to reconnect, conjoin, or reintegrate the student's self to the world around them. This essay hopes to have shown how this Cartesian philosophy of man does indeed underlie our educational institutions, regardless of their denial to support any particular view of human nature; and, further, how this hidden assumption fails to provide an education that properly cares for the self. By entertaining the possibility of such criticisms, we have already begun to question the foundations of how we think about learning—and, in a time of failing educational standards and a time of intellectual decline in the United States, such a questioning is all one could ask for.

Endnotes

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From Jacques Maritan's *Education at the Crossroads* (New Haven: Yale University Press, 1943) pp 47; found in William K. Frankena's Philosophy of Education (Macmillan Company, New York, 1965) "Man's Nature and the Aims of His Education,"

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