

On the Ontological Notion of Education

Jeremy HORNE

Newland University

San Felipe, Baja California 21850 Mexico

mindsurgeon@hotmail.com

ABSTRACT

Wikipedia on "Education" raises the process-product debate, epistemic versus skills aspects, and the role of experience. "Education" is often a "that" (object or process) or an "is", explicitly something inside of us. Philosophy is implicit in the ontological (study of existence, reality, or being) and teleological (study of purpose/goals) debate over education. For there to be a purpose, there must be some thing (existant, ontological) to give rise to it. Neither deontology nor intention generate goals, because an entity must produce the goal, or *telos*. That is, there must be the existence of an origin, a being, to generate the intent. C. W. Churchman's 1962 *The Design of Inquiring Systems* (arguing that systems - including education, are teleological - purpose-driven) is insufficient, as ontology is also necessary. I explicate the notion of education with a dictionary-etymology sequence, then proceed to "educate", to draw out from (implying potential). Further word analysis introduces "knowledge" that is being imparted, or taught, the chain of words – educate-educate-knowledge-recognize – indicating that education is leading one to knowing, or recognizing him/herself, the essence, the self, who is the origin, for whom there is a purpose. Dialectically, the individual exists because of others (society) and conversely. Accordingly, we have the internationally-inclusive body, UNESCO's "Four Pillars of Learning": know, do, live, and be, all critical for identity development, hence, identity location and characterization. The Authentic Systems identity probe does precisely this by seeing one's life as purposeful (praxeology – goal-directed, Churchman's view of systems) but having an ontology. Perforce, philosophy undergirds Authentic Systems, this co-equal to education giving force to one's identity.

NB: I follow a modified British punctuation method. The U.S. ones are illogical.

Keywords: Personal Education Identity, Order, Personality, Authentic Systems, Core Values, Knowledge, UNESCO's "Four Pillars of Learning", ontology-teleology in education.

1. INTRODUCTION

Of course, it is not a bad idea to know what we are talking about in discussing "education" and its function. Better still, we need to ascertain if it even exists! This goes for anything, like flying horses, unicorns, Santa Claus, the Easter Bunny, an honest politician, or the tooth fairy, each having its phantasmal appearance in different forms to different people. Yet, implementing what one thinks education is can have disastrous results, with students learning by rote memory, relearning everything every time, regurgitating propaganda dictated by the

"educational" institution, or attempting to conceptualize without an adequate fact base.

Education is not the only element for discussion but to what it pertains, i.e., *Homo sapiens sapiens*, the (the technically correct anthropological term for the human subspecies). Clearly, this subspecies is in trouble, facing its extinction (global warming, prospects of thermonuclear annihilation, overpopulation, environmental degradation, and increasingly radical income stratification – to name a few). With the rapid development of artificial intelligence and the real possibility of it making decisions for humans, knowing who we are becomes more vital. Casting doubt on what has emerged as "education" symptomizes one aspect of humanity's crises, for (as will be shown below) "education" affirms who we are.

Knowing who we are through "education", by the very questions raised about its meaning and dictionary references, requires philosophy, or the love and pursuit of truth, contemplation of value, and thinking about thinking. "Education", like all elements in our universe, has two "ends" – ontological (its existence) and teleological (its reason for existence, or purpose/"goal"/function). For the latter, if we cannot discern a purpose, it is sufficient to say that its existence for us to contemplate is its reason to be.

The ontology-teleology coupling obeys the most fundamental law, popularly known as the "unity of opposites" (oftentimes referred to as "dialectics", explained by Heraclitus and the ancients) [Chronopoulou, 2024]. Something exists because of what it is not. The infinitesimal cannot exist without infinity, the same as for the number line. An origin cannot exist without a consequent, or end. We will see this corresponding to the individual-group dialectic, one's inability to exist without the other. That is, the one is in terms of the many, the person because of the society, and vice versa, each referencing the other.

Here, 'education' sets well in this context. "Education", as we will see by definitions below, usually is in the context of a school system, the students, teachers, physical plant, curriculum, and administration acting as an ensemble to obtain and convey knowledge from the teachers to students. John Dewey (influenced by Hegel's dialectics) in his book *Democracy and Education* argued that the theoretical/abstract exists because of action/doing, theory in terms of practice, with the schools harboring this dialectic as education. Yet, scholars will discuss "education" from a systems and teleological point of view, saying that it is a goal-directed process.

For example, the call "Inviting you to participate in an event based on interdisciplinary communication on transdisciplinary notions and topics:" [personal email of 23 December 2022] had an

attached document, "Extended Abstracts Received and Accepted", one accepted anonymous abstract, "The Notion of Education", stating:

A Systems Approach Meaning:

Based on what has been termed Singer/Churchman's "pragmatic Teleological Truth" (Churchman, 1971), the Systems Approach can be interpreted from two perspectives: (1) a pragmatic philosophical framework and (2) the inherent nature of any system to have goals, objectives, or purposes. Within this framework, a system's truth is determined by its effectiveness in achieving its goals, objectives, or purpose—its *telos*.

Consequently, education, whether as a process, a formal structure (for explicit formal education), and/or an informal organization or culture (for implicit informal education), can be defined by its *telos*. Its truth, in turn, is measured by its pragmatic effectiveness in achieving that *telos*.

The "Churchman, 1971" reference appears in "Inter-Disciplinary Communication Rigor" [Callaos and Marlowe, n.d.] as "Churchman, C. W. (1971). *The Design of Enquiring Systems: Basic Concepts of Systems and Organization*. New York: Basic Books, Inc. Pub.". Searching for the title "The Design of Enquiring Systems" yields a seminal 1962 paper by Churchman [1962] of the same title, save for the spelling "Enquiring" versus "Inquiring".

Systems are designed for a reason, a purpose. Perforce, they are teleological. In this mix is "design", begging the question (perhaps theological), "designed by whom?". For example, what of organisms? Do we impose "system" on them, or are they inherently arranged as interacting components designed for a reason, accepting inputs, and delivering outputs? I also ask about the values inspiring the motivation, namely, the origin, or ontology, because if there is a purpose, there must be something existing (ontology) for that purpose. That is, a purpose has a purpose, to fulfill the conditions for an existant (an entity in our world). I will return to this shortly.

About systems, Churchman writes:

The important point in weighting the objectives, however, is that the weights be functions of some property of the individual who can produce the alternative means. Specifically, we shall want to say that the weights correspond to the individual's "Intentions" or "utilities" or "values." In this case, we can speak of the individual as a purposive entity. [Churchman, 1962, p.7]

"Property" pertains to the individual, such as values, although one's actions are teleological.

While systems may be teleological, Churchman in the forward, says, "... this essay does not delve deeply into the value system of the designer, although this is an issue of some real concern" [Ibid., p. 1]. Ontology (opposite of *telos*) generates purpose - fulfilling core values - to which my paper is directed. Values characterize existence. A person is the origin of meaning.

By sustaining the ontology-teleology dialectic, Churchman provides an instance of the most fundamental law (MFL),

... for something to be taken to exist [ontology], it must be assumed essential in the development of inquiry. One cannot separate out segments of inquiry and stamp "existence" or "reality" on these alone, because, according to the argument, these segments exist as segments only because of the rest of the system. [emphasis added, Ibid., p. 43]

The individual exists because of the system, and conversely. What is more essential in developing inquiry than the individual generating it, more explicitly one's core?

Churchman refers to "the whole higher education system" [Ibid., p. 16]. I now apply the foregoing. How does "education" relate to us individually and our identity (authentically, i.e., their core)? This paper presents some routes to inquiry, suggesting that education is a process shaping our very essence, but its generator (origin) must be explained.

Method sets the direction of academic travel, i.e., how I get to my thesis that education evokes the content of one's core and becomes a part of it as a dynamic. In that, I must show there is something there; ontology's exegesis is mandatory. What entails "education" follows, its scope, agreed-upon definitions (word meaning) based on past use (etymology), and context. Along the way, "identity" will emerge, this too warranting explication. These are against the backdrop of philosophy (how we think about these things), incorporating ontology (study of existence), epistemology (how we know), knowledge, and teaching/learning.

The episteme - techne dichotomy is a controversial focus of "education", temporarily resolved by "schooling", whose processes are teaching (conveying) and learning (acquiring). Yet, the schism does not prevent our linking education (schooling in the larger domain) to personal identity development. We will see in our journey through education and its relationship with personal identity the role of philosophy co-equal to education. Indeed, the wellspring of Authentic Systems and its identity probe under consideration is philosophy, particularly the nature of "being", expressed by what one does and nurtured by education. Dictionary and etymological renditions of "education" say so. I will trace a path from the commonly accepted meanings of "education" (giving its "notion") to the origin (ontology) and object (teleology) of process, and finally to our existence as *Homo sapiens sapiens*.

2. SOME NOTES ON METHOD

How do we know if something exists? Philosophical investigations have not overcome the metaphysical barriers to "truly" identifying what is real. Is reality simply all in our heads, mere "consciousness" [Hoffman & Prakesh, 2014]? Is it a simulation [Bostrom, 2003; Canarutto, 2011]? Epistemology is justified belief, but with what method? Each is problematic. In the end, we accept, or believe. Even the criteria and the criteria for evaluating criteria form a set of all sets dilemma. Mathematicians and logicians cease the unending uncertainty, draw a line, establish a reference frame, bootstrap, and follow the trail from that vantage point. If they can predict accurately based on the past, they proceed. At the end is acceptance, even of our existence.

Etymology is history, customs, and traditions, shaping a contemporary word's communicating essence to others. It translates the empirical (information gained by the senses, an epistemology). Words are related to each other by semantic webs, one word defined with others, each of those words defined by still others, and so forth, until the first word in the end is connected by a series of others to itself. That we can trace these connections is a function of logic, still another epistemology. How we call on all these epistemologies and systematically or in an ordered manner compare the past to the present and project to the future, with the intent to manipulate, refers to scientific methods. Yes, we can add faith and intuition to the epistemologies.

The object of epistemology conveyed by education is "knowledge". The complicated method of discerning the meaning of "knowledge" (outside the scope of this paper) is a literature review of perhaps hundreds of thousands, if not millions, of books and papers on the subject through the millennia. Mine is just an overview of how we can see "education" having the same existence status as us personally. Or, is education void of substance, no different from a random walk?

I rely on dictionaries, socially agreed-upon written accounts of customary word use, sampling definitions and etymologies to represent a discussion linking education to personal identity. My chaining words together approach will help establish the case for education's relationship to personal identity. I extend my method to the other essential related words, such as "knowledge" and "identity", to show how I can arrive at the conclusions I do.

3. A WORD ABOUT ONTOLOGY

Ontology, the study of what exists (what is "real"), is often relegated condescendingly to the domain of unsophisticated and naive university sophomores. Let's temper imperious pronouncements with some doses of sobriety in assessing the human condition with the following reminders to place ontology in its proper context. To the fore is the real possibility that artificial general intelligence "housed" by biocomputing quantum supercomputers could assume human identity and bring to bear Issac Asimov's nightmare of human extinction.

Set an android ostensibly having "consciousness" alongside a human, both behind a curtain and facing an audience. Here, is the setting for the Turing test and the audience having to decide which is human or artificial. Belief decides, but the criteria for belief depend upon predictive accuracy. Still, there is acceptance of accuracy. Accuracy looks to tolerance, or limits, boundaries set by those seeking precision, like finding the area under a curve.

Acceptance of personal existence is evidenced by a person's actions, in our case, coupling with education and finally becoming it. A highly controversial but necessary sidebar is a person in a vegetative state. Here, does a "person" in that mental state exist, with thought required for values formation? On the same basis, I accept my presence (call it faith, if you will); I see that something else has the same level of existence. (Such is the foundation of number and time [Horne, 2020].) Problems of "free will" have the same level of resolution - our acceptance, independent of the fact that everything may be predetermined, our having no say in an event's outcome. Here, we act as if something were the case, again, bootstrapping. Ontology,

existence, and our assertion of it collectively is a bootstrap. All these factors are philosophy, without which "education" would be impossible.

All epistemologies are provisional, including faith and intuition. We assume that custom, history, tradition, and any rendering of the past are recordings of events similar to the present, and those laws governing them [Feynman, 1965] will continue in the future, this observation we call the "Principle of Induction". Physical laws could change, multiple and interpenetrating dimensions may exist, and time may not (as well as its very character). I have not even ventured close to the quantum world, where all physical laws and other factors giving rise to the features of our universe are fluid or not identifiable. As "bedtime reading", we can review the nature of the singularity that birthed our universe, where everything (perhaps processes) was indistinct.

Edwin Abbot wrote in his 1884 *Flatland* of two-dimensional people not able to explain an object falling from the sky, requiring an awareness of a third dimension – space. Applying Abbot, paradoxes, like the set of all sets, Gödel's incompleteness theorem, and our inability to escape our bias (getting outside ourselves to see ourselves), may require additional dimensions.

We are back to acceptance. Mathematicians and logicians will explain (if they are honest) that the foundations of formal systems – axioms, definitions, rules, and primitives – are constructions, that is, assumptions, or bootstraps. However, they observe their ability to predict with these systems, lending credence to their description of what there is in our dimension. Again, that credence is established by acceptance. These foundations of our systems – constructions that they may be – do not necessarily alter the supposition that there may be innate structure in the Universe, that order, itself, is innate [Horne, 1997]. That is, what they have postulated or bootstrapped may be discoveries of what really exists. After all, randomness, disorder, and the inability to predict contradict the characterization of this universe on which we depend.

Humans ostensibly cobble together rules that are repeatable, ordered, and designed to predict the future, again, these rules being discoveries, rather than constructions. How these are assembled and deciding whether the prediction is accurate depends upon the same existence status, or ontology, giving them substance. How do we do this?

Paul Feyerabend [1993/1975] argues that there is no method but only a declaration of acceptance. Where, for example, did August Kekulé conceive the Benzene ring as a hoop snake (or Archimedes' discovery of water displacement in a bathtub by yelling "Eureka")? Feyerabend would call it the "aha" method, one thinking they realize something is the case, that is, acceptance of existence.

Given these limitations, I commence, as that logician or mathematician, by setting forth definitions and their customary uses (etymology) to establish my thesis, that education sustains personal identity and gives it content, philosophy the substructure. Already, I have set forth some rules, definitions, and axioms. Customary logical grounding and relationships (rules) apply, such as transitivity, equivalence, and implication. Still are the definitions from which my thesis will emerge: identity, followed by education (and its derivatives) and knowledge.

4. THE HUMAN REFERENCE FRAME, IDENTITY, AND DEEP STRUCTURES

The one (identity) and many (environment) perforce establishes order, hence, structure. As Plato in *Gorgias* said:

SOCRATES: Then the house in which order and regularity prevail is good; that in which there is disorder, evil? And is not the virtue of each thing dependent on order or arrangement? Yes, I say. And that which makes a thing good is the proper order inhering in each thing? Such is my view. And is not the soul which has an order of her own better than that which has no order? Certainly. And the soul which has order is orderly? Of course. And that which is orderly is temperate? Assuredly. And the temperate soul is good? [Plato, 2008].

At the minimum, I stop the inevitable squabbling over there being innate order in the Universe, saying aimlessness, the inability to predict, and scientific methods, which depend on randomness do not generate what we take to be "knowledge". To chaos (in the technical sense of the word), I say, "yes", randomness, "no" [Horne, 2017], the former allowing exploration through education, the latter the ending of our universe. Order's relationship to identity appears in my complete discussion of our core, order, structure, and identity in my "A framework for personal identity location" [Horne, 2024]. The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, by its very title, implicitly affirms Plato. To avoid insanity, let's be comfortable with what we at least think is order, hence mental tranquility.

5. EDUCATION

5.1 The scope of "education"

Wikipedia on "Education" offers an excellent discussion, raising the process-product debate, epistemic versus skills aspects, and the role of experience. "Education" is often treated as a "that", such as an object or process, as opposed to an "is", more explicitly something inside of us.

People confuse education with training and instruction [Horne, 2015]. At issue is knowledge, what is known where one's new acquisition of it is someone else's familiarity. That is, knowledge is perspectival. Yet, a distinction should be made, as in the Greek's classic *episteme* - *techne* dichotomy (separating education from training) [Parry, 2024]. From Wikipedia, we have:

Episteme

...etymologically derived from the Ancient Greek word ἐπιστήμη for knowledge or science, which comes from the verb ἐπίσταμαι, "to know". In Plato's terminology *episteme* means knowledge, as in "justified true belief", in contrast to *doxa*, common belief or opinion. The word *epistemology*, meaning the study of knowledge, is derived from *episteme*.

Techné

"...etymologically derived from the Greek word τέχνη (Ancient Greek: [tékʰnɛː], Modern Greek: [ˈtɛxni] (

listen)), that is often translated as "craftsmanship", "craft", or "art"."

Episteme is seeking newness; *techne* is dealing with the known. Comparing this to logic, *episteme* is inductive logic, reaching outward into "space" to "see what is out there", based on what is known. Or, think of traveling on the high seas, not expecting what will appear on the horizon. From "*episteme*" comes epistemology, justified belief, or, in layperson's terms, how we know. Epistemology changes mere information (which can be true or not) into knowledge. *Techne* is deductive, a closed domain, where we can identify and manipulate all the elements. *Techne* is mechanics, trades, fabrication, and vocational. A repair manual represents *techne*. These are only conceptual distinctions, as *techne* and *episteme* bookend a continuum representing extremes, like:

- theory – practice/application
- abstract – concrete
- science – technology
- boundless – bounded

... one eliding to another, not unlike angstrom units depicting the color spectrum. When does red become orange, for example? Even with an Angstrom value, repeated subdivision yields the infinitesimal, and we are left to set the limits to cease the subdivision or for some application, just like calculus. Extremes can be containerized, at least so we can observe them, and, in our case, it is the school, where the learning process applies to deduction, induction, abduction, and logical admixtures.

One's *techne* is another's *episteme*, as in a person learning how to repair a car for the first time, especially, where insights on life may develop. I often think of that popular 1974 book by Robert M. Pirsig, *Zen and the Art of Motorcycle Maintenance*, which Wikipedia describes well, a work apropos to my working my way through graduate school as an auto mechanic in the 1980s and of which people repeatedly reminded me. No, I never read the book!

Let's proceed to see the social consensus on word meanings.

5.2 Dictionary definitions and etymologies

We now come to the common/dictionary uses of education and its derivatives and knowledge, the ostensible subject of education. The etymologies are included for context, history, and custom (the "becoming" of the word). I first provide the definition, followed by the etymology, and then some observations.

Definitions

The Cambridge dictionary has: "the process of teaching or learning, especially in a school or college, or the knowledge that you get from this". Merriam-Webster says,

- a : the action or process of educating or of being educated
- also : a stage of such a process
- b: the knowledge and development resulting from the process of being educated

NB: The first is tautological. The second, though not framed well, at least refers to knowledge as the outcome. "Development" is vague, begging the question, "developing regarding what?".

Britannica tells us:

education, discipline that is concerned with methods of teaching and learning in schools or school-like environments as opposed to various nonformal and informal means of socialization (e.g., rural development projects and education through parent-child relationships).

For Oxford Learner's Dictionaries:

a process of teaching, training and learning, especially in schools, colleges or universities, to improve knowledge and develop skills

What has been the customary use?

Etymology

mid-15c., *educaten*, "bring up (children), to train," from Latin *educatus*, past participle of *educare* "bring up, rear, educate" (source also of Italian *educare*, Spanish *educar*, French *éduquer*), which is a frequentative of or otherwise related to *educere* "bring out, lead forth," from *ex-* "out" (see *ex-*) + *ducere* "to lead" (from PIE root **deuk-* "to lead"). The meaning "provide schooling" is attested by 1580s. Related: *Educated*; *educating*.

<https://www.etymonline.com/word/educate>

From Latin *educatus*, past participle of *educare* ("to bring up or rise up or train or mould or nourish" (a child, physically or mentally), rear, educate, train (a person in learning or art), nourish, support, or produce (plants or animals)), frequentative of *educere*, past participle *eductus* ("to bring out or lead out or draw out or rear" (a child, usually with reference to bodily nurture or support, while *educare* refers more frequently to the mind)), from *e* ("out") + *ducere* ("to lead, draw").

<https://en.wiktionary.org/wiki/educate>

Seen in Latin as *educatio*, linked to the use of the verb 'to educate' as *educāre*, to express a principle of directing or guiding, associated with *educēre*, interpreted as 'revealing' or 'exposing' to the outside, composed of the prefix *ex-*, indicating 'to take out' or 'to externalize', and *ducēre*, for the action of 'to conduce' (in Latin *conducēre*, governed by the prefix *con-*, in terms of union or totality), evidencing reference in the Indo-European **deuk-*, for 'to lead', carrying or guiding, whose influence is manifested in *duke* (from the French *duc*, in reference to the Latin forms *dux*, *ducis*), to produce (over the Latin in *producēre*) or even in *seduce* (defined by the Latin *seducēre*). A clear idea is expressed: to promote the intellectual and cultural development of the individual and, at the same time, to encourage the learning of new concepts and skills.

<https://etymology.net/education/>

Middle English, to rear, from Latin *educatus*, past participle of *educare* to rear, educate, from *educere* to lead forth — more at *educ*

<https://www.merriam-webster.com/dictionary/educate#word-history>

Returning the Merriam-Webster, we have for the word history of "educ":

Educe: *verbi-'dūs* also *-'dyūs* *educated*; *educing*
Synonyms of *educ* transitive verb 1: to bring out (something, such as something latent)

Observations

Bass and Good [2004] say, "One [*educare*] calls for rote memorization and becoming good workers. The other [*educere*] requires questioning, thinking, and creating." Common to all is that education is a process, such as a method. The obvious questions are, "lead from where/what to where/what? Bring out what? What is being taught? What is the object of the process? To what end, or goal, is the process?". Many definitions will introduce "training" as education, but they are not necessarily the same. Neither is "instruction". "Teaching" is not adequate, because training is a form of teaching.

6. KNOW AND KNOWLEDGE

If education is a process, then what is being imparted, or taught? If it is knowledge, we need to go through the same process as with "education" – definitions, etymology, and analysis. I need only a couple of examples to make my case linking education to personal identity.

Definition

From *Middle English* *knowen*, from *Old English* *cnāwan* ("to know, perceive, recognise"), from *Proto-West Germanic* **knāan*, from *Proto-Germanic* **knēaną* ("to know"), from *Proto-Indo-European* **ǵneh₂-* ("to know").

<https://en.wiktionary.org/wiki/know>

Etymology

From *Middle English* *knowleche*, *knaweleche*, *cnawlece* ("knowledge"), from *knowen* ("to know, recognise") + *-leche*. Related to *Middle English* *knowlechen* ("to find out, acknowledge"). For more on the Middle English suffix *-leche*, compare *freelage*. Compare also *Old English* *cnāwelēc*, *cnāwelēcing* ("acknowledging, acknowledgement").

<https://en.wiktionary.org/wiki/knowledge>

Old English *cnawan* (class VII strong verb; past tense *cnēow*, past participle *cnawen*), "perceive a thing to be identical with another," also "be able to distinguish" generally (*to cnawan*); "perceive or understand as a fact or truth" (opposed to believe); "know how (to do something)," from *Proto-Germanic* **knew-* (source also of Old High German *bi-chnaan*, *ir-chnaan* "to know"), from PIE root **gno-* "to know."

<https://www.etymonline.com/search?q=know>

Observation

"Recognize" implies we have a standard, model, or reference frame by which we can compare. Given the above chain of words - educate-educate-knowledge-recognize, it is acceptable to enter into common discourse that education is leading one to knowledge, i.e., recognition of him/herself! While the teleology of education, its purpose, may be to lead someone towards knowing themselves, the essence remains, that of the self, who is the origin, or the substance of it all (ontology), for whom there is a purpose (teleology). A person without knowledge (created by *episteme* through education, hence philosophy) is unable to recognize her/himself. So far, I have provided only an individual-oriented view of "education".

7. EDUCATION AND UNESCO

Concerning organisms, if there is an individual, there is something that is not an individual, a group of individuals. (The rare cases are species coming into being or going extinct, although the boundary between species is problematic. Think, for example, of the last dodo bird.) Here, I am following on the heels of Churchman's, "segments only because of the rest of the system", "segments" here referring to individuals collectively in society. Given the most fundamental law, the individual exists because of what it is not, the society. So, too, society exists because of the individuals comprising it. Education for oneself correspondingly needs a social aspect, and the organization internationally (world-encompassing) is the United Nations Educational Scientific and Cultural Organization (UNESCO, 1996) setting forth its "Four Pillars of Learning", learning to:

- **know** – "acquiring the instruments of understanding" [Delors et al., 1996, p. 86]. It is a means and end in life, that is, ontological and teleological. This learning leads to wisdom (the pinnacle of values hierarchy pyramids).
- **do** – "act creatively on one's environment" [Ibid.]. Doing/action is an expression of the required power, the ability to imposing knowledgeable will (as opposed to anarchic action) on a situation. Otherwise stated, it is knowledge put in practice (praxis).
- **live together** – "participate and cooperate with other people in all human activities" [Ibid.]. To live together requires social fairness as justice—whereby we are to act in the field of attitudes and values. Such is the axiology, the study of values.
- **be** – "an essential progression which proceeds from the previous one." [Ibid.]. Being requires integrity of the self, not degraded by conflict. The absence of conflict is a function of harmonious living and its underpinning, the love of one for another. Love is the opposite of hate, the former bringing people together, the latter setting them apart from each other. Education, itself, is learning to be.

Note the dialectics: know-do (abstract-concrete), live together-be (socialization-individual integrity). These four are critical for identity development. Any finding of one's identity must account for how the educative processes of learning are present in one's core and in what priority.

In passing, we should realize that personality "tests", values clarifications programs, counseling, and even philosophy courses fail to assess the degree to which they are internalized so a person

may "Know thyself" (Greek: Γνώθι σαυτόν, gnōthi sauton), as the inscription on the ancient Greek Temple of Delphi admonished. How do we know that a person has internalized these values?

A socially-contextual identity assessment instrument locates the content of knowing and the core of one's "being". Returning to "know" and its derivatives, I couple UNESCO's "do" with "be", looking to history. Aristotle and Plato worried about hypocrisy, imploring people to be virtuous, doing the best they were able [Haslanger, 2004]. The 2700-year-old Hindu denomination Vaishnavism thought pretension is the enemy of one's integrity [Wisdom Library, 2024]. Christians are familiar with "By their deeds you will know them. Does a man gather grapes from thorns or figs from briars [Mat.7.16.NMV]?" Actions speak louder than words. The same principle in studying effects to know the source applies to archaeologists and forensic scientists. Physicists "know" what the smallest of the smallest is – a "particle" by what it does (movements), not its unobservable "what it is" [Beyer, 2014]. Those "personality assessments" fail in the be-do dialectic. We now have a stage set for identity location – the traits to be found and a method for finding them.

8. THE AUTHENTIC SYSTEMS IDENTITY PROBE

The Authentic Systems identity probe is predicated upon finding one's pattern of behavior, or life theme [Voris, 2019]. Both an online identity assessment, designed "...to help you understand which of these Life Themes plays the most vital role in how you think and act" [Voris, Discover Your Life Theme, 2025] and an in-person detailed Authentic Life Theme Assessment (ALTA) "Discovery Session Workbook" explicate the theory of the life themes approach. A person's responses to the probe are collated and analyzed, the assessment falling under one of UNESCO'S four groups [Voris, 2019, p. 35]:

Wisdom (UNESCO - learning to know)

"... possess a natural, deep desire to grasp knowledge" [Ibid. p. 59]. Wisdom People excel in careers or social roles requiring extensive knowledge. The Wisdom Person is happiest when serving as an expert go-to person or resource for others. He or she is more than happy to take on all the research and knowledge acquisition for which others have neither the time nor the inclination [Ibid., p. 60].

Power (UNESCO - learning to do)

... a need to act upon your thoughts and get into action. Empowerment finds its expression and purpose through you as a natural leader and agent of change [Ibid, p. 69]. Power people value the alphas and implore others to be so, and are the resource to make this happen, ... advising, consulting and guiding others to achieve their own self-realization and mastery" [Ibid., p. 70]. These persons are the ones who emphasize responsibility, decision-making, assertiveness, and other traits that make persons leaders.

Justice (UNESCO - learning to live)

... awareness of what is fair, right and good and can balance between fact and sentiment. ... First, abstractly,

as an arbiter and negotiator, guiding others toward the ideas of excellence and integrity. Second, physically, as an artist or engineer seeking symmetry and harmony through the art of creating. [Ibid., p. 47]

Love (UNESCO - learning to be)

keen awareness of the needs of self and others. empathy, advocates for other peoples, rescues others, is a communitarian, family-oriented, cares for animals (and plants and the environment), volunteers, is altruistic, shares, and generally puts others above themselves. [Ibid, p. 35]

All interoperate (with one dominating) to yield a pattern of observed behavior, or life theme. A life theme cycle appears as an interaction among the authentic (one's core/values) and synthetic (behavior) sides, with a "rejuvenator", or "alternate way of being" (such as in recreation).

Such is education integral to one's identity, but for a wider scope, philosophy generates the system. "Answers and Support for Life's Biggest Questions" [Voris, Answers and Support for Life's Biggest Questions, 2025] implicitly refers to the subject of philosophy but is more explicit with "Applied Philosophy in Action", i.e., praxis. What philosophy, then, is applied? What is the ontological aspect? Voris writes, "But perhaps the solution is not psychological, but rather philosophical. After all, philosophy has long grappled with questions of meaning, purpose, and the human condition for centuries" [Ibid.]. Returning to the four life themes, we see the four major subjects studied in philosophy departments: wisdom (theories of knowledge, ethos), power (social philosophy), love (ethos, aesthetics), and justice (social philosophy – law, ethics). One's internalization of these in varying degrees is exhibited by their virtue, hence, authentic identity. Contributing to the philosophical content is education, leading that person to "know thyself".

9. SUMMARY AND CONCLUSIONS

In this paper, I have set forth the crucial problem of fractured identities, arguably the worst consequence of which is social breakdowns and a factor contributing to the sixth great extinction. One's knowing her/himself requires an examination of personal virtue, actions matching core values. "Education", perhaps the most vital aspect of our becoming aware of our environment, is a word with contentious meanings. Yet, it is a part of one's being. How do we agree that it is?

Ontology, teleology, axiology (study of values), epistemology (justified belief), and knowing (our recognition), perforce, buttress education, these words the province of "philosophy", the love of wisdom (the pinnacle of simply knowing), thinking about thinking, and the pursuit of truth. Philosophy is integral to those with an identity having integrity., just as is education.

A human limitation is our seeming inability to apprehend anything by itself. Drawing upon the same observation by ancients, like Heraclitus, we have the most fundamental law (MFL), something existing because of what it is not, that is, the "unity of opposites". Yet, we need a way of forging ahead with inquiry. Facing the challenging view of academic anarchists, like Paul Feyerabend, that there is no method to arrive at conclusions

but only unexplained sudden awareness ("aha"), an alternative approach accounting for inescapable human bias is bootstrapping, or provisional acceptance of definitions, rules, and axioms, just as mathematicians and logicians do in arriving at equally provisional conclusions. Such avoids entanglement with metaphysical controversies in selecting methods.

Education can be an object (something to be obtained and/or manipulated, something with substance) or as a process, or method. It can be purposeful, goal-directed, or teleological. It also can be seen as an origin, existant, or ontological. (A worthy sidebar is the public or popular treatment of "existant" as an adjective, misspelling, or simply not rendered in a dictionary. It is an entity that has a state of being.) Applying the MFL, ontology exists because of teleology and conversely. Ontology (a priori) points to teleology (a posteriori) as a line, the simplest dimension, the primordial of arrangement (order) displaying from the infinitesimal to the infinite. Now, we have to place education in this context. In the end, education becomes us.

One way of knowing (epistemology), custom and tradition, initiates inquiry into how education is a part of human identity. Dictionaries and etymologies provide notions of our words, and notion is sufficient to impel discourse on the learning-knowledge-education-personal identity nexus. "Knowledge" emerges axial, triggering ancient references to knowing oneself. From education's customary usage (etymology) comes leading one to an awareness of her/himself, that is, identity location and characterization.

Educating is leading, conducting the individual to knowledge. It is a process nexus between the individual (core) and knowledge. The ontology of education is the individual, the latter knowing her/himself by conducting/educating her/himself through her/himself, truly a recursive, second-order cybernetic phenomenon. Ontology is origin, existence, or being, *dasein* (as the Germans would say). Being is ongoing, perhaps timeless. An individual IS education, as well as philosophy. Without knowing the individual, we will not know what education is, hence, the need for an identity probe, one necessitating philosophy.

Because of the most fundamental law, the individual exists because of society (and conversely). UNESCO represents the international perspective on education with its "Four Pillars of Education", knowing, doing, living, and being. An efficacious identity probe should incorporate these, the emphasis on "know" and its derivatives), that axial word in the definitions and etymologies.

To this point, I have collected the requisites for the identity probe: actions, not mere assertions; philosophical foundation/approach; individuation to assert one's uniqueness. Generic assessments, like personality "tests" and values clarification programs lack all these collectively. A successful probe, like Authentic Systems, initiates with the effects, with a person's actions exhibited by the core containing meaning, or values. We know people by their deeds, shunting aside hypocrisy and affirming uprightness, or authenticity. Its philosophically-based method reveals that the probes do educate people about their identities, and indeed, a person's core is education, itself.

10. RESEARCH DIRECTIONS

We are in the alchemy stage of human identity research. Most critical is understanding mentation ("consciousness", itself [Horne, 2022], David Chalmers' "hard problem". Research in genetics and neurocorrelates of mental conditions seeks to replicate the human brain [Horne, 2024]. Artificial intelligence (AI) poses myriads of challenges, a primary fear being artificially intelligent entities, like large language models, quantum supercomputers, and biocomputing controlling us. Skirting the problem by obsessing about the selfish concerns of job displacement is the existential displacement of human agency by a non-human entity [University of Toronto, 2023].

Closer to home with personal identity, the body of cases of individuals having had their identities probed by the Authentic System method is an excellent resource for quantifying the method and assessing its predictive ability. Our final "takeaway" is that education is how we provide substance to personal identity, the internalization of values to yield a virtuous person. It is the acquisition of awareness by epistemically reaching outward into the unknown to gain knowledge. By it, we internalize the love and pursuit of truth.

ACKNOWLEDGEMENT

My heartfelt thanks is to Dr. Risa Blair, Department of Humanities and Social Sciences, Purdue Global University for reviewing this paper and her time in doing so.

REFERENCES (all accessed 3 February 2025)

Bass, R.V. and Good, J.W. (2004). Educare and Educere: Is a Balance Possible in the Educational System? *The Educational Forum*, 68(2), pp. 161-168. Win 2004ERIC Number: EJ724880 <https://files.eric.ed.gov/fulltext/EJ724880.pdf>

Beyer, H.R. (2014). Forum sponsored by physicist Demetris Christopoulos "Is the concept of field the proper way to describe physical processes? Question Asked October 12, 2014 What is a field?". <https://www.researchgate.net/post/Is-the-concept-of-field-the-proper-way-to-describe-physical-processes>

Bostrom, N. (2003). Are You Living in a Simulation?, *Philosophical Quarterly* (2003), 53(211), 243-255. <https://simulation-argument.com/>

Callaos, N. and Marlowe, T. (n.d.) Inter-Disciplinary Communication Rigor. (unpublished, "Initial Seed/Base Draft"). <https://www.iiisci.org/contents/TIDC/Interdisciplinary-Communication-Rigor.pdf>

Canarutto, D. (2011). Nature's software. arXiv:1404.5529v1 [gr-qc] <https://arxiv.org/abs/1404.5529>

Churchman, C.W. (1962). On Inquiring Systems. SDC-Series, SP-877, 13 July 1962. Santa Monica, CA: System Development Corporation. <https://ia600601.us.archive.org/15/items/chuindex/DIS-Stanford.pdf>

Chronopoulou, E. (2024). Heraclitus And The Rig Veda: A Cross-Tradition Engaging Examination *Comparative*

Philosophy, 15(1), 19-34. ISSN 2151-6014
[https://doi.org/10.31979/2151-6014\(2024\).150105](https://doi.org/10.31979/2151-6014(2024).150105)

Delors, J. et al. (1996). *Learning: the treasure within* - report to UNESCO of the International Commission on Education for the Twenty-first Century (highlights). UNESCO: Document code: ED.96/WS/9. ISBN: 92-3-103274-7 (UNESCO), 0-11-984387-0 (HMSO).
<https://unesdoc.unesco.org/ark:/48223/pf0000102734>;
<https://unesdoc.unesco.org/ark:/48223/pf0000109590>

Feyerabend, P. (1993 [1975]). *Against Method: Outline of an Anarchistic Theory of Knowledge*. Verso Edition: London. https://monoskop.org/images/7/7e/Feyerabend_Paul_Against_Method.pdf

Feynman, R. (1965). *The Character of Physical Law*. Massachusetts: MIT Press. <https://www.ling.upenn.edu/~kroch/courses/lx550/readings/feynman1-4.pdf>

Haslanger, S. (2004). The Greek Concept of Virtue. Student handout, for Ancient Philosophy 24:200. MIT Open Courseware. https://ocw.mit.edu/courses/24-200-ancient-philosophy-fall-2004/340916a74de1775088445f199f778388_greekvirtueshort.pdf

Hoffman, D., & Prakesh, C. (2014). Objects of consciousness. *Frontiers in Psychology*, 5, 1-22. <https://doi.org/10.3389/fpsyg.2014.00577>

Horne J. (1997). Logic as the Language of Innate Order in Consciousness. *Informatica*, 21(4): 675-682. <https://www.informatica.si/index.php/informatica/issue/viewIssue/85/71>

Horne, J. (2015). A Philosophy of Learning. *The Journal on Systemics, Cybernetics and Informatics* (JSCI) 13(6). <https://www.iiisci.org/Journal/PDV/sci/pdfs/IP008LL15.pdf>

Horne, J. (2017). The Ontology of Randomness. In *Encyclopedia of Information Science and Technology* (4th ed.). Hershey, PA: IGI Global.

Horne, J. (2020). The ontology of number. Unpublished manuscript. Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4723589

Horne, J. (2022). A Framework for Studying Consciousness. *Consciousness: Ideas and research for the twenty-first century*: 9(1), article 1. <https://digitalcommons.ciis.edu/conscjournal/vol9/iss1/1/>

Horne, J. (2024). A framework for personal identity location: The structural foundation of values. *Cognitive Neuroscience eJournal* 15(15), 20 August 2024 Available at SSRN: <https://ssrn.com/abstract=4907825>

Parry, Richard, "Episteme and Techne", *The Stanford Encyclopedia of Philosophy* (Winter 2024 Edition), Edward N. Zalta & Uri Nodelman (eds.), <https://plato.stanford.edu/archives/win2024/entries/episteme-techne/>.

Plato. (2008). *Gorgias*. Translated by Benjamin Jowett. Project Gutenberg. Release Date: March, 1999 [eBook #1672] [Most

recently updated: April 27, 2022] – Bekker reference - 481b–508c. <http://www.gutenberg.org/files/1672/1672-h/1672-h.htm>

University of Toronto (2023). Why Geoffrey Hinton is worried about the future of AI. U of T News, University of Toronto, Schwartz-Reisman Institute for Technology and Society, 23 June 2023. <https://srinstitute.utoronto.ca/news/why-geoffrey-hinton-is-worried-about-the-future-of-ai>

Voris, J. (2019). *Discover the Power that Drives Your Personality: How Four Virtues Define Your World*. Carmel,