

Researching Ourselves

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EXTENDED ABSTRACT

Education, research, and methodologies form an organic unit that is the essence of human identity. Education is the object (which also is a process); research is the domain of process in which knowledge is to be found; methodology is the manner in which a person is to bring information into the mind that is to be transformed into knowledge. Education etymologically stems from conducting or leading, that is knowing oneself. It is transdisciplinary, recursive, and second-order cybernetic, all aspects of organicity, or life, itself. It is not enough to realize these things; we need to apprehend the context in which these are set, i.e., our universe, itself, conscious and organic, as we are. Did not God make us in his image, as the Biblical saying goes? Along the way, we need to be cognizant of innate processes in the universe, such as the most fundamental law known since ancient times and expressed by GWF Hegel, the unity of opposites, as well as organicity, itself (as opposed to static entities). These factors implicitly describe transdisciplinary access to knowledge. Anatomically, the Universe is both deductive and inductive, the former as descending from the outer limits of our knowledge to the center (ourselves), the latter inductively, reaching outward to find what is there to be known. These "ends", from the infinitesimal to the infinite, describe the domain of research. Our method of investigation is contradiction, employing the unity of opposites, the most extreme form of critical thinking. Permeating the Universe is Plato's realm of the ideal, consciousness, the transcendental, represented by the words of Buddha, Christ, Mahoma, Aristotle, and Plato, among others. Truth characterizes the Creator, and so is the object of search in education, and so it is, we must realize authenticity, both in ourselves and the world around us. Training as deduction, validates it through virtue (internalizing behavior exhibiting our values, or

meaning). Truth, itself is a function of order. A disordered identity compromises a person's being, and conversely. Two methods of identity location are neurocorrelation and deep personal questioning (as with an authentic method of self-discovery). I will merely reference the former and describe in more detail the latter, a representative being Authentic Systems, showing specifically why it is educative.

NB: I follow a modified British punctuation method. The U.S. one is illogical.

Keywords: Education, Research, Philosophy, UNESCO's "Four Pillars of Learning", Transdisciplinary, Personal Identity, Values, Personality, Authentic Systems, Virtue Ethics, Cybernetics

1. INTRODUCTION

Recently, I received a call for papers for the 9-12 September 2025 IMSCI conference answering the question, "Why are reflection and/or reflexivity in research and/or educational practice academically valuable? And/or why are they societally valuable?" (emphasis included). A lot is packed together, not the least of which are the meanings associated with "research", "education" (and its derivatives), and "valuable" (alluding to the role of meaning). "Academic" deserves scrutiny (especially when contrasted to non-academic, as in technical, or mechanical). "Social" provides the vital context. Finally, "reflection"/"reflexivity" includes self-examination. Overall, we are seeking meaning in ourselves, the generator of the research. It is a transdisciplinary second-order cybernetic investigation of ourselves, the "trans" part emphasizing the binding motivation of every search for knowledge, the love of wisdom and truth, and pursuit of both, i.e., philosophy.

A central reason for world conflict is fractured identity, persons failing to know themselves and allowing their lives to be unexamined. One need only look at decrepit condition of the US school system and student alienation to see the evidence [Winthrop et al., 2025; Sorrenti et al., 2025; OECD, 2017; Morinaj, Hascher & Hadjar, 2018; Lopez, 2024]. This says nothing about their lack of knowledge, critical thinking, and philosophy putting students at risk of being overtaken by artificial intelligence [Uquieta and Horne, 2025].

Philosophical context is critical, for it governs our very being and the very nature of knowledge, just as physical laws tell us what we can and cannot do. That is, researching and knowing about ourselves implies the same about our universe, such as the unity of opposites, law of succession, the *raison d'être* for it all, and similar questions to which far too little attention has been paid in our societies. If we do not know what is valuable for ourselves, we will fail to value our environment.

After introducing a foundational vocabulary, I establish the philosophical environment in which we search for meaning. An identity probe, Authentic Systems, briefly describes self-revelation through reporting how one has internalized (lived) values, and how these feed back into motivating future behavior.

2. VOCABULARY

Horribly defective as language is, we can obtain a sense of a word's meaning by how it has been used throughout history, that is, its etymology. It helps place us all on the same metaphorical contextual page. This paper relies on etymology to discuss research and related words/concepts as discovering not only our own authentic authenticity but that of our environment and what governs it. Here, I present more of a method, rather than a comprehensive glossary.

The following order of words follows the overall conceptual/thematic development outlined in this paper, from the initial question about education, its transcendent (transdisciplinary) character, the process - research, the system and its operations tying these together recursively through second-order cybernetics, and these channeled by introspection into the focal point of it all, us.

2.1 Educate

The etymology points to education meaning to lead one, i.e., "Middle English, to rear, from Latin *educatus*, past participle of *educare* to rear, educate, from *educere* to lead forth — more at *educer*" [Merriam-Webster, 2025, Educate]. For the word history of "educer", "Educere: verbi-'dūs also -'dyūs educer; educing Synonyms of educer transitive verb 1: to bring out (something, such as something latent)" [Merriam-Webster, 2025, Educer]. This includes bringing something out of ourselves. Something latent is not apparent to us.

Elsewhere [Horne, 2015], I have explained the major conceptual difference between education (*episteme* – the search for knowledge) and training (*techne* – working with the known). While there is a n overlap (depending upon the knowledge level of a person) mixture of both, the former is transcendent and reaching outward into the unknown, the latter descendant and applying what is known to create something of utility.

2.2 Transdisciplinary

"Trans" means "across", and "discipline" is a circumscribed area of investigation, more commonly a "specialty, such as microbiology, aeronautics, or Asian history [Horne, 2020]. "Transdisciplinarity is an approach that crosses disciplinary boundaries to address complex issues that cannot be adequately addressed within a single discipline... emphasizes collaboration... promoting a holistic understanding... and fostering innovative solutions [Cowin, et al., 2023, p. 139]".

"Transdisciplinary" means searching for knowledge (implicitly, education), learning, or problem-solving that integrates and transcends multiple disciplines to create new frameworks, knowledge, or solutions unachievable by any single discipline. "Trans" is both a process (method) and object (values), represented by values hierarchies, like those of Maslow, Scherer, and the DIKW Pyramid [Horne, 2024, p. 8]. At the top, we find the ideal, consciousness, and the transcendental, inhabited by Buddha, Christ, Mahoma, Aristotle, and Plato, among others. Truth characterizes the Creator, and so is the object of education; here is authenticity, both in ourselves and the world around us.

Training as deduction, validates it through virtue (internalizing behavior exhibiting our values, or meaning). Truth, itself is a function of order. A disordered identity compromises a person's being, and conversely.

2.3 Research

research (n.)

1570s, "act of searching closely," from Middle French *recerche* (1530s, Modern French *recherche*), back-formation from Old French *recercher* (see *research* (v.)). Meaning "scientific inquiry" is first attested 1630s. Phrase *research and development* is recorded from 1923.

research (v.)

1590s, from Middle French *recercher*, from Old French *recercher* "seek out, search closely," from *re-*, intensive prefix (see *re-*), + *cercher* "to seek for," from Latin *circare* "go about, wander, traverse," in Late Latin "to wander hither and thither," from *circus* "circle" (see *circus*). Related: *Researched*; *researching*.

At the outset, "research" ostensibly seeks out, but can reach inwardly, as will be seen shortly. "Wander" is intriguing, something many instructors do not want their students to do in a term paper, thesis, or dissertation, surely not "hither and thither". Instead, they are to focus on a topic (often in training mode for a corporation or regime) or be rebuked for interdisciplinary exploration.

2.4 Cybernetics and Second-order cybernetics

Education brought about by researching ourselves happens recursively and organically (a life process). André-Marie Ampère (1838, p. 140), first used "cybernetics" in 1838.

Ce n'est doc que'apres toutes les sciences qui s'occupent de ces divers objects qu'on doit placer celle dont il est ici question et que je nomme Cybernetique, du mot *κυβερνητική*, qui, pris d'abord, dans un acception restreinte, pour l'arte de gouverner un vaisseau, recut de l'usage, chez les Grecs meme, la signification, tout autrement entendue, de l'arte de gouverner en general.

It is only after all the sciences which deal with these various objects that we must place that which is in question here and which I call Cybernetics, from the word, *κυβερνητική*, which, taken first, in

a restricted sense, for the art of governing a vessel, received from use, among the Greeks even, the meaning, quite differently understood, of the art of governing in general. (emphasis included)
[Translation by Horne]

Norbert Weiner [1948], the modern originator of his eponymous book *Cybernetics*, wrote that it is "the scientific study of control and communication in the animal and the machine". He and his colleague, Dr. Rosenblueth

... have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name of *Cybernetics*. [Ibid., p. 11]

That is, both animal and machine communicate, and we study how this is done and how to manage it. Yet, he realized that a black box view was insufficient, that we need to know more about the communicating entities, humans the most difficult.

In is the social sciences that the coupling between the observed phenomenon and the observer is hardest to minimize. On the one hand, the observer is able to exert a considerable influence on the phenomena that come to his attention. With all respect to the intelligence, skill, and honesty of purpose of my anthropologist friends, I cannot think that any community which they have investigated will ever be quite the same afterward. [Ibid., p. 163]

In other words, in the social sciences we have to deal with short statistical runs, nor can we be sure that a considerable part of what we observe is not an artefact of our own creation.

[Wiener, p. 164]

Up to the late 1960s and mid 1970s, investigations were held to be neutral, or objective exercises, scientific methods expected to eliminate dogma, biases, and ideology. Inspired by the Copenhagen interpretation, Heisenberg, and ostensibly unrelated researchers like Margaret Meade and Ernst von Foerster came to realize the object of investigation was through the eyes of the investigator. Meade introduced the phrase "cybernetics of cybernetics" at the initial session of the American Cybernetics Society (ACS) in 1968 [Glanville, 1995, p. 200]. Her desire to "...consider the significance of the set of cross-disciplinary ideas to pursue interdisciplinary research, which we first called 'feedback'." [Ibid.]".

That teleology (purpose) of feedback systems was to become the ontology and process, both giving rise to an examination of ourselves, that is "cybernetics as a way of looking at things" [Ibid.] This cross-disciplinary germ helped generate what we know today as "second-order cybernetics" (SOC).

Recounting the 1940s and early 1950s as relatively simple, Meade realized that 1968 complexity mandated that we take into account all the detail and interactions of large-scale systems, one missed factor potentially disrupting everything.

If we think of the steps through the early interdisciplinary development of cybernetic models, through general systems theory and our growing willingness to include more and more complex systems, I think that now we have to take another step and develop ways of thinking about systems that are still bounded but within which there are loci of very contrasting degrees of organization and disorganization. [Ibid. p. 9]

Her critique of the organizational meeting of the Society for General Systems Theory—specifically its failure to reflect on how its investigative methods should apply to itself—underscored a profound irony. The cybernetics of cybernetic proposal to the ACS was to henceforth grow into a mainstream idea. Not unlike those attempting to find a universal language (Leibniz, Russell, Esperanto), Meade saw that role for SOC.

From a less personal perspective, early systems theorists such as Ross Ashby (1960), in *Design for a Brain*, conceptualized systems as entities inherently striving for self-maintenance—an idea he embodied in the construction of the homeostat. A flurry of systems writers, like David Easton, Talcott Parsons, and Ludwig von Bertalanffy elaborated. Given everything being in a constant state of flux, systems, themselves, are not static. They are dynamically attempting to maintain themselves, adapting, improving, or failing to do either, thus going out of existence in their current form. Humans and societies are systems implicitly dynamic.

Wiener's cybernetics had to be applied to the participants, animal and machine. That is, the observation was inherently biased. Foerster [1979] wrote:

how would it be possible to make a description in the first place if not the observer were to have properties that allows for a description to be made? Hence, I submit in all modesty, the claim for objectivity is nonsense!

...With this I come now to the other root for our cognitive blind spot and this is a peculiar delusion within our Western tradition, namely, "objectivity": "The properties of the observer shall not enter the description of his observations."

"What are the properties of an observer?"

... a therapy of the second order has to be invented in order to deal with dysfunctions of the second order. I submit that the cybernetics of observed systems we may consider to be first-order cybernetics; while second-order cybernetics is the cybernetics of observing systems.

...social cybernetics must be a second order cybernetics—a cybernetics of cybernetics—in order that the observer who enters the system shall be allowed to stipulate his own purpose: he is autonomous. [Ibid.]

While a full treatment of "objectivity" belongs to a broader epistemological inquiry, it remains evident that total detachment is illusory. We are unable to transcend our own consciousness to view ourselves from an Archimedean point. Likewise, any purportedly external observer remains bound by their own interpretive horizons. Inescapably, we encounter ourselves only through ourselves—we are at once subject, reference frame, and origin of meaning.

2.5 Introspection

We arrive at an inherently second-order cybernetic (SOC) process: introspection. The challenge of how we can—not necessarily should—think about ourselves is among the most profound and elusive in human experience. A common tendency to evade this question reveals itself in our reactions to self-representation: seeing ourselves in a mirror, viewing a video of our behavior, or even hearing a recording of our voice often evokes discomfort. Beyond the distortions introduced by the medium itself, there frequently lies an aversion to engaging with a reflection of the self—suggesting fear, shame, or a destabilized sense of identity.

Efforts to reconcile with the self (including one's environment, as they are co-constitutive) may take the form of meditation—ideally aiming at the suspension of thought and sensory input—values

clarification, psychotherapy, or philosophical inquiry. Yet, these approaches often fall short when they rely solely on verbal articulation or declarative self-description. Simply stating one's values or reporting on one's mental state does not disclose the self in its depth. The experience of "impostor syndrome," for example, underscores the gap between self-report and lived identity.

"Know thyself"—the ancient Greek maxim inscribed on the Temple of Apollo and echoed in Socratic philosophy—calls not only for reflection on whether we have lived in accordance with what we deem meaningful or virtuous (cf. Haslanger, 2004), but also for a deeper inquiry into the very process of knowing. This involves examining what we superficially refer to as "introspection", a term that, etymologically, suggests looking inward, yet carries complex epistemological implications. From *Etymology Online*:

1670s, "action of closely inspecting or examining," noun of action from past participle stem of Latin *introspicere* "to look into, look at, examine, observe attentively," from *intro-* "inward" (see *intro-*) + *specere* "to look at" (from PIE root **spek-* "to observe"). Meaning "action of searching one's feelings or thoughts" is from 1807.

We pay attention to the object at which we are observing: ourselves. We look inward to see ourselves through ourselves, ostensibly unable to separate ourselves to see ourselves as an independent (and presumably a neutral observer). Group consciousness, even if every person on Earth is involved, collectively is biased towards that group, that is anthropocentric. Animal rights persons refer to "speciism", our inability or refusal to see life from the animal's perspective. Again, we bootstrap, aware of our biases.

3. EMERGING PHILOSOPHICAL CONTEXT

Given the above concepts underpinning the vocabulary, I set forth a philosophical framework for authentic identity. Returning for a moment to "transdisciplinary", "trans" signifies a bridge, but for the bridge to have any meaning, both entities connected by the bridge must be known. Here, it is the individual and her/his world, including the laws governing it. This section is the "world" end of the bridge. The conscious Universe, each of us with

specific mentation, is an organic being obeying laws, or processes defining what we can be or do: the unity of opposites and the law of succession.

The most fundamental law (MFL), the "unity of opposites"—often associated with dialectics as introduced by Heraclitus and other ancient thinkers suggests that something exists precisely because of what it is not [Chronopoulou, 2024]. The infinitesimal depends on the existence of the infinite, just as any point on the number line only has meaning in relation to the whole. An origin presupposes an end, each defining the other. This logic applies to the dialectic between the individual and the group; neither can exist independently. The one exists in relation to the many—the person through society, and society through the person. Each is a reflection and condition of the other.

Succession gives us number, as Giuseppe Peano [1889] outlines in his foundational treatise (*Arithmetices Principia Novo Methodo Exposita*) upon which mathematicians rely: zero is a number; the successor of zero is a number. Such follows from the very nature of the simplest dimension allowing the Universe even to exist – the first, the line, thus giving birth to time, hence, before, or after, or succession, allowing counting to begin. How does it begin? A helpful metaphor is mitosis, or cell division, the operative word "division". Remember, the Universe began as an amorphous whole, or singularity. How did it gain life, of dynamism? Succession allows , time, change, recursion, and any dynamism. How do we get there?

Aristotle in his 4th century BCE book *Physics*, said things "... become known to us later by analysis. Thus we must advance from generalities to particulars; for it is a whole that is best known to sense-perception, and a generality is a kind of whole, comprehending many things within it, like parts" [Aristotle, 184a (Bekker number)]. Rene Descartes, agreed that if we are to know anything, we must "... divide each of the difficulties under examination into as many parts as possible, and as might be necessary for its adequate solution" [Descartes, 1637/1912, p. 15]. Repeated subdivision results in the quantum world, where nothing is certain. The unity of opposites mandates the opposite of reductionism - wholism - to obtain knowledge.

Another dialectic is at work: the immaterial is intelligible only in relation to the material, and vice

versa—a tension familiar to scholars of consciousness studies through Descartes' mind-body dualism (ibid., p. 121). Capturing authentic human identity requires engagement with both sides of this dialectic. While this may seem removed from the question of authenticity, the matter hinges on reconciling the existence of the discrete—stasis, objects, deduction, individuality, analysis, the self, and ultimately the infinitesimal—with the amorphous—processes, induction, synthesis, environment, society, and the infinite. The self emerges only in contrast to what it is not. Within this tension, second-order cybernetics produces the singularity we recognize as identity.

Research, then, is not merely a pursuit of external knowledge, but a recursive, cybernetic process of educating ourselves about ourselves. It is not simply informational—it is transformational. True education is not only lifelong; it is life itself. Research arises from thought, and understanding what structures and governs thought provides the necessary context for meaningful inquiry.

4. REQUISITES FOR IDENTITY PROBE

Because meaning constitutes the cornerstone of one's *raison d'être*, philosophy emerges as an essential foundation for human inquiry and identity. A central branch of philosophy, axiology, concerns itself with the study of value. Closely related to axiology is ethics, which involves the codification of conduct derived from these core values—or *ethos*. Morality, in turn, refers to the concrete enactment of these ethical principles, or their instantiation in real-world behavior. As such, philosophical reflection is inherently embedded in any sincere effort to explore personal or collective identity.

In the natural sciences, even fundamental constructs like the "particle" remain elusive. Physicists, for instance, do not directly observe the particle itself but rather analyze the probabilistic behavior of the field in which the particle is theorized to exist—via statistical mechanics [Beyer, 2014]. Experimental research across disciplines often follows this model: we observe the outcomes of interventions and infer causality from these observations. Similarly, investigations into human identity—especially within the domains of the self and the "other" in sociocultural contexts (e.g., Symbolic Interactionism and the Multi-Level Framework of Identity, unity of

opposites)—proceed by evaluating the alignment between declared values and long-term behavioral patterns.

The principle that values manifest in actions has deep historical roots. As expressed in the biblical text: "By their deeds you will know them. Do people pick grapes from thornbushes, or figs from thistles?" [Matthew 7:16, NMV]. Philosophers, such as Aristotle and Plato, advocated for a life of virtue, wherein individuals internalize and live in accordance with their values—what is meaningful to them [Haslanger, 2004]. Likewise, ancient traditions such as Vaishnavism, a 2700-year-old denomination within Hinduism, maintain that disingenuous behavior—pretending to be someone one is not—undermines personal integrity [Wisdom Library, 2024].

Within the philosophical triad of ontology (cause), teleology (purpose), and epistemology (knowledge or effect), both reductionist and holistic methodologies can serve to illuminate the authenticity of an individual's values. This assessment involves evaluating the alignment between professed principles and consistent, observable behavior over time. Cartesian dualism, as extended through contemporary physicalism—in disciplines such as neuroscience, genetics, and computer science—provides a framework for identifying material correlates to mental and moral phenomena (Horne, 2024, *Structural*). These fields converge in the domain of artificial intelligence, where testable models aim to simulate or replicate human behavior by associating values with physical or computational structures.

Yet, such reductionist efforts remain incomplete without a holistic perspective—one capable of offering a comprehensive account of both a person's behavior and the generative values underlying it. Authenticity, in this sense, cannot be fully understood without integrating both the mechanistic and systemic dimensions of human identity.

4.1 How to probe

A paradigmatic instance that fulfills these philosophical and methodological criteria is Authentic Systems, a framework grounded in wholistic (contextual, inductive, synthetic, etc.) methodologies—principally phenomenology—while also employing Cartesian distinctions to categorize

behavior into discrete groupings or life themes. These themes represent enduring patterns of behavior that reflect the individual's lived experience. The system is self-sustaining, or bootstrapping, through the application of a persistent quaternary value structure rooted in ancient philosophical traditions. Within this framework, an individual typically expresses a dominant life theme, which functions as the primary manifestation of their core values and existential orientation. An extensive questionnaire (outside the scope of this paper) elicits answers about one's past activities and objects with which s/he has interacted.

Table 1. Virtue ethics perspectives

PLATO [Republic Book IV, 426-435. a] (Bekker number)]	ARISTOTLE [Aristotle - Nicomachean Ethics]	AUTHENTIC SYSTEMS
wisdom	prudence	wisdom
justice	justice	justice
moderation	temperance	love
courage/fortitude	courage	power

... wise, courageous, moderate and just. (Bloom – Republic 428e – p.128/509)

From South Asia come [The four puruṣārthas](#) [Dharma](#) (righteousness, moral values), [Artha](#) (prosperity, economic values), [Kama](#) (pleasure, love, psychological values) and [Moksha](#) (liberation, spiritual values, self-actualization).

Wisdom is Moksha. Justice is Dharma, ethics (rules of conduct – and codified by law) exhibited as morality. Love, of course is Kama. Power is Artha, the prosperity and economic values as evidence and stemming from one's attempt to make others and the environment do her/his will.

Since 1996, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been developing educational policies guided by *Learning: The Treasure Within*, with its Four Domains of Learning, set forth in Chapter 4, "The Four Pillars of Education":

Learning to know, (Wisdom) by combining broad general knowledge with the opportunity to work in depth on a small number of subjects. This also means learning to learn, to benefit from the opportunities education provides throughout life.

It aims to provide individuals with the cognitive tools required to better comprehend the world and its complexities, and an adequate foundation for future learning.

Learning to be, (Love) to develop one's personality and act with greater autonomy, judgement and personal responsibility. The aim is to provide individuals with the self-analytical and social skills to develop to their fullest potential. Accordingly, education must not disregard any aspect of a person's potential, including memory, reasoning, aesthetic sense, physical capacities and communication skills.

Learning to do, (Power) to acquire not only occupational skills but also, more broadly, the competence to deal with many situations and work in teams. It also means learning to do in the context of young people's various social and work experiences. These can be informal, as a result of the local or national context, or formal, involving courses, alternating study and work. This pillar aims to provide individuals with the skills to effectively participate in the global economy and society.

Learning to live together (Justice) , by developing an understanding of other people and an appreciation of interdependence – carrying out joint projects and learning to manage conflicts – with respect for the values of pluralism, mutual understanding and peace. This exposes individuals to the values implicit within human rights, democratic principles, intercultural understanding and respect, and peace in society and human relationships. It enables individuals and societies to live harmoniously. [Delors et al., 1996]

These historical and contemporary artefacts – Classical Greek, South Asia, and the modern UNESCO – support a quaternary virtue ethics systems as a bootstrap, or reference frame for types of authentic human identity.

Wisdom and justice have obvious correlates to antiquity. To have love, one must be tolerant of another person's faults and have understanding, or empathy. Power requires courage, exhibited by fortitude. Authentic Systems presents the behavior exhibited by the four themes.

Love: Advocates of Humanity

One with a life theme of love has a "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. [Voris, 2019, *Discover the Power*, p. 35]

Justice: Arbiters of Humanity

The justice theme is about

... 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]

These are translated into life as:

An architect brings function and aesthetics

- A landscape artist brings together nature and human imagination
- A chef finds balance to ingredients, temperature and time.
- A negotiator finds harmony between two in conflict
- An editor seeks symmetry between the author and the world.

[Ibid., p. 48]

Wisdom: Teachers of Humanity

Persons with a wisdom theme "... possess a natural, deep desire to grasp knowledge" [Ibid. p. 59]. that may be compulsive They are more more objective, as opposed to being emotional. One is "...driven to know what you feel is required" continuing "to learn more and more until you are sufficiently satisfied only to be driven again" [Ibid, p. 60].

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]

Researchers, academics, teachers, and investigators would fit into this class.

Power: Leaders of Humanity

Power concerns, "... 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 one who emphasize responsibility, decision-making, assertiveness, and other traits that make persons leaders.

Relationships of themes

While one theme dominates, others exist to varying degrees. Each of these has interactions with others, with 16 possible permutations, ranging from a person meeting another with the same theme or others, and getting along to total antagonism toward the other.

For examples,

- Because the Justice Theme consists of part Love and part Wisdom, a Justice Person finds strong kinship with a Love Person. It is very common to see pairings of Love People with Justice People. [Ibid., p. 93]
- Power People are all about action and they announce the actions needed to be done. If a Love Person agrees with the Power Person's agenda, then all is well. Ultimately, the Power People need Love People to serve the agenda. [Ibid, p. 97]
- The Justice Theme consists of part Love and part Wisdom, so a Justice Person finds kinship with either a Wisdom Person or a Love Person, depending on which of these is more dominant within the Justice Person. A good example is if the Justice Person expresses 70% Wisdom and 30% Love. The Wisdom person will occasionally find the 30% Love mildly irritating but certainly worth the relationship.[Ibid., p. 103]
- Wisdom People may be drawn to one another in social circles, projects and causes, perhaps because they need to work together in some capacity to synergistically combine their individual knowledge. However, in terms of close personal relationships, a Wisdom Person and another Wisdom Person is a relatively rare combination unless other motivations are sufficiently diverse. [Ibid., p. 111]
- This combination definitely falls under the category of strange bedfellows. Rare, but still entirely possible with enough awareness and mutual understanding, a relationship between a Justice Person and a Power Person is far more likely to be fruitful if the Justice Person favors Wisdom over Love in his or her personal mixture

of the two virtues. [Ibid., p. 113]

A life Theme--

- is irreducible and absolute and cannot contain another Theme.
- must be independent from all contextual characteristics.
- must be present in every culture and historical period.
- must generate meaning to form and content of linguistic expression.
- must assist in the construction of the self.
- must manifest in dialog expressing aspects of the self.
- is responsible for the bias found in awareness and later choices made.
- must defines both guilt and shame.
- must be one of four Virtues elevated to theme from which all evolves.

[Private email – 3 November 2023]

Only one can dominate and mediate the others . It is the reference frame for the other three, still operative but at the behest of the dominant one.

These themes have an Authentic Identity Blueprint - being, doing, and escape.

Introducing of how these four behavioral type generate action into a SOC cybernetic model allow us to predict how a person (student, teacher, administrator, or one outside) will "manage" the school system (both with education and training), as in attitudes toward learning new things, focusing on the object of discovery, rather than how knowledge is generated, how a person will interrelate with the school environment over all, especially with personnel, and how that person will value schooling, overall. For example, course selection, study methods, pedagogy, and administration all are shaped by one sense of meaning, discoverable by the above-described identity probe.

5. SUMMARY AND CONCLUSIONS

To answer the question "**Why are reflection and/or reflexivity in research and/or educational practice academically valuable?** And/or why are they **societally valuable?**" requires not only a framework, but more, important, a philosophy underpinning it. Combined and organized, the reflexivity refers to looking at ourselves, asking, "Who are we?", but, moreover, "What is important, or meaningful, to

us?". The highest value is the love and search for truth and wisdom, the province of philosophy. It is the peak of meaning in a hierarchy of values, the essence of the "trans" in "transdisciplinary, the interrelationship and interdependence of all field of study under the same canopy of that guiding search for truth. Education is the leading of oneself to their core of values, their authentic identity, by researching (searching for knowledge) under that interdisciplinary umbrella. Perforce, one is their own research object, bearing out the content of second order cybernetics. Altogether, these elements for an individual organic being that mirrors the Universe with its consciousness. Research in the body aspect of Descartes' dualistic view of humans must be equalized dialectically by self-investigation using the mind. Thought must be born out by deed, and this is revealed by an appropriate identity probe, herein described by Authentic Systems.

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