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“I thought to myself, if evil can be organized so efficiently [by the Nazis] why cannot good? Is there any reason for efficiency? to be monopolized by the forces for evil in the world? Why have good people in history never seemed to have had as much power as bad people? I decided I would try to find out why and devote my life to doing something about it.”

Robert S. Hartman

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THE NON-MATHEMATICAL LOGIC OF A SCIENCE OF VALUES

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Abstract

This paper joins the ongoing debate that has taken place in the pages of this *Journal* around the type of mathematics that inheres in the logic of formal axiology. The author argues that the validity of formal axiology as a scientific theory rests on its axiomatic foundation. This foundation is independent of the explanatory value that various forms of mathematics may bring to our better understanding of axiological theory. This essay explores first the analogous nature of the relationship between math and the logic of value; and second it discusses the axiomatic foundation of the logic of formal axiology. The author proposes that three axioms, not just one, are needed in order to establish the science of values known as formal axiology.

Introduction

In the pages of the first three annual issues of the *Journal*, a lively and healthy debate has taken place around the type of mathematics that inheres in the logic of formal axiology. The energy stoking this debate has been fueled by a tendency of interlocutors to conflate science with mathematics. This is, in my view, both unfortunate and unnecessary. The debate misconstrues the ways that Hartman often described the role of mathematics in the logic of formal axiology.

In this essay, I will argue that the validity of formal axiology depends neither on *a bushel and a peck...*, nor *a transfinite set*. Rather, the validity of formal axiology as a scientific theory rests on its axiomatic foundation. This foundation is independent of the explanatory value that analogies with various forms of mathematics may bring to our better understanding of the theory. Formal axiology does not need mathematics in order to be a coherent scientific theory of the social sciences.

1. Background of the Debate

This tendency to conflate mathematics with science in our interpretations of Hartman's writing is one of the thorniest of the issues facing axiological scholars today, and it is a conceptual stumbling block to advancing the theory and practice of formal axiology. The mathematics question is important enough that in 2008 the Board of Directors set it as one of five strategic goals for the Institute to find or develop a mathematics other than transfinite math, which really succeeds in creating a calculus of value—in short, to find one “that works” (Edwards, 2009, 151). Writing in the Editor's page of Vol. 2 of the *Journal*, Edwards frames the issue in the following manner: “The main problem with making axiology a science is with finding a mathematics that is adequate to the task” (2009, 1). He concludes a subsequent article in that volume with: “At present, we are only halfway there in creating a successful science of value. Only the math, the weak part, enables computation, exactness, and the development of a calculus of value” (2009, 165).

Proponents of the mathematical foundation of formal axiology tend to take one of three stances. Norm Hirst (2009, 1) is most vocal in defending Hartman's description of transfinite math as the basis for the structure of value. Frank G. Forrest (1995, 156) generally agrees with Hartman that transfinite mathematics is, indeed, the basis of formal axiology, but he concludes that Hartman failed to apply the logic of transfinite math properly in his description of the cardinality of the extrinsic realm of value. All the while, others including Mark A. Moore, Ted Richards, and James Weller, argue that the logical basis of formal axiology needs to be mathematical, but that transfinite math is the wrong mathematics to apply. Weller (2009) proposes fractal geometry; Moore (1995, 2008) argues that a model based on quantum wave theory may provide a more solid grounding for formal axiology. Richards (2008; 2010) points out convincingly the shortcomings in the math proposed by Forrest, Moore, and Hartman, himself. Richards (2010, 112) advocates the pursuit of some form of finite mathematics. He offers four such formulas— including Moore's—for consideration, while cautioning that none of them give the same value ranking as does Hartman's hierarchy of value. It would seem that we are no closer to a calculus of value than when the math debates began.

My issue with this debate is as follows. Since the validity and value of the HVP depends on its isomorphism with the hierarchy of these value/valuational combinations, if that hierarchy is dependent on math, and if the math behind it is currently unjustifiable, then the HVP rests on shaky ground. It would not be enough that it has been shown empirically by Leon Pomeroy (2005) to correlate strongly with other widely used psychometric tools such as the MMP3 and the Cattrell CAQ. Such cross-validations are helpful, but not sufficient, to validate the claim that formal axiology makes to being a value science for the social sciences. If the only justification for the merit of the HVP is its empirical validation, then it is no more scientific than other theories of value such as Milton Rokeach's (Hurst, 2009).

Two matters in this debate deserve greater attention: 1) the analogical relationship between math and the logic of value and 2) the axiomatic foundation of the logic of formal axiology. When these matters are examined, the conclusion can be drawn that formal axiology does not need mathematics in order to be a coherent scientific theory of the social sciences.

2. The Logic of Values as Analogous to Math

On the one hand, I challenge the assumption, often outlined in this *Journal*, that Hartman uses mathematics as the foundation of the logic of value. On the other hand, I find evidence in Hartman's writings that, for him, the relationship between math and the logic of value was stronger than merely a metaphor in the way that Byrum has argued (2008). Instead of either extreme, I think that Hartman is suggesting a middle ground—that the logic of value is *analogous* to the logic of mathematics. I have found in Hartman's writings a number of instances where he described the logic of value as it applies to the social sciences in just this way and where he clearly states that the logic of values is not mathematical in nature.

This interpretation lands me in neither of the two camps which have been most vocal in the pages of the *Journal*. Mathematics is not a foundational element of the logic of value in the way that math is the foundation of natural sciences. Nor is math merely a metaphor for describing the logic of value. Rather, the logic of formal axiology is the foundational element of a value science *just as* mathematics is the foundational element in the natural sciences. Since I am swimming against a strong current here, I will go to unusual lengths to buttress my argument by quoting Hartman's own words as they have been published on several different occasions.

In his autobiography, Hartman writes: "Like mathematics, formal axiology is a kind of logic, though a different kind..." (1994, 54). In *The Knowledge of Good*, he writes: "Just as today mathematics is the language of natural science, axiology will then be the language of value science" (2002, 51). These two passages certainly read as though Hartman conceptualizes the logic of values as being *analogous* to the logic of the natural sciences. The logic of values is not mathematical logic.

In *The Structure of Value* (1967), the same book which is cited most often by other axiologists to bolster their claims that a mathematical basis of formal axiology is a necessity, Hartman again makes clear that his references to math are analogies, not prerequisites to a science of the social sciences. When distinguishing scientific systems from philosophical ones, Hartman writes that scientific systems have an "overarching system, a superstructure or universal pattern which, in the natural sciences, is mathematics. But mathematics is not the only such system possible" (1967, 30). He continues by remarking, "Formal axiology is to moral philosophy as mathematics is to natural philosophy or as the theory of harmony is to music." He repeats this analogy in his essay on "The Measurement of Value" and continues, "But if [value sciences] are to be sciences then there must be a formal frame of reference which must order these sciences as mathematics orders the natural

sciences; and this formal frame of reference is what we call formal axiology....” (1959).

In his essay on “The Nature of Valuation,” Hartman writes:

Axiology is the pure science which is to the social sciences as mathematics is to the natural sciences. It is formal and universal, built on simple axioms, and contains all possible frames of reference for the social sciences as value sciences. It is the logic of value as mathematics is the logic of fact (Hartman, 1991, 11).

The frequency and the consistency with which Hartman expressed himself in such terms about the mathematics question over so many years gives credence to my assertion that the logic of formal axiology is not based on mathematics. Hartman makes this analogy to demonstrate that the logic of value does for the social sciences what mathematics does for the natural sciences. It brings order and orderly thinking to what, otherwise, remains chaotic. This leads us to ask, “How does it do that?” I posit that it does this by being an axiomatic theory.

3. The Hierarchy of Values Accepted as an Axiom

In both logic and mathematics, an *axiom* is a proposition that is assumed without proof for the sake of studying the consequences that flow from it. An axiom cannot be deduced from anything else, as it is a starting point. Once stated, however, an axiom provides the foundation of a formal deductive system. Clearly, by building formal axiology on the concept of good as concept fulfillment, Hartman developed an axiomatic science. He often refers to formal axiology in this way. In fact, he often, though not always, seemed to indicate that only this one axiom—the one defining good—was needed to establish the scientific foundation of formal axiology (Hartman, 1967, 103; 2002, 97).

I will argue, however, that more than one axiom is needed to establish the axiomatic foundation of this science of value. In fact, I’ll posit that at least three axioms are needed to establish a solid foundation for the theory of formal axiology as we know it today. In addition, one corollary must be recognized to establish an axiomatic foundation for the HVP. I recognize that here again, I am swimming against the mainstream of interpretations of formal axiology, and that my argument is not in accord with how Hartman often explained the axiomatic basis of his theory. We will need to explore how this could be. First, however, I’ll seek to show that, if we accept the presence of three irreducible axioms of formal axiology, then the great math debate which currently consumes so much attention in this *Journal* shrinks in significance.

If we accept that a small number of axioms, at any rate more than one, may be used as the basis for a theory, then we are in good company. Newton posited 3 laws

of motion. There are 3 laws of thermodynamics (or 4, depending on who is counting); Euclidean geometry is built upon 5 irreducible axioms.

One area where virtually all members of the Institute agree is that formal axiology is an axiomatic theory. Its axiomatic nature is part of what Hartman said makes formal axiology a science. Let me now put a slightly different emphasis on something that Hartman wrote, and which I have already cited once in this essay. I quote again:

Axiology is the pure science which is to the social sciences as mathematics is to the natural sciences. It is formal and universal, built on simple *axioms*, [italics mine] and contains all possible frames of reference for the social sciences as value sciences. (Hartman, 1991, 11).

Note in the above quotation that Hartman used the plural “axioms.” Although at other times, Hartman (1967, 103; 2002,97) seemed to say that all of rest of his theory of formal axiology is built upon a single axiom—the definition of good as concept fulfillment—I will argue that there are at least three axioms needed to comprise this theory. What if we accept three axioms as being the foundations of formal axiology? What would that make of the mathematics question? What would it do for the internal consistency of the theory of formal axiology? I believe it would provide a stronger foundation, one that overcomes the weaknesses in the currently accepted superstructure of transfinite math. Let’s look at what these three should be.

This first axiom is largely undisputed. With this axiom, Hartman formulated a definition of good generally as concept fulfillment or more precisely as fulfillment of the intension of a concept (1967, 101-106). Let’s allow this axiom to stand as defined by Hartman.

The second axiom of formal axiology, in this construct, is Hartman’s claim that there are three fundamental types of value—the intrinsic, the extrinsic, and the systemic. Each of these is correlated with a fundamental form of language—the singular, the analytic, and the synthetic. Although Hartman (1967) implies that the three types of concepts derive naturally or logically from his definition of good, Rem B. Edwards (2010, 43-44) has argued persuasively they are not derivative. Hartman’s three-part description of values is a separate construct. So, let’s allow Hartman’s designation of three types of value to stand as the second axiom of formal axiology.

Note that this axiom does not in any way deal with content; only with form. It does not attempt to answer: “What things are good?” Attempts to answer that would be applications of this formality, not the formality itself (Edwards, 2010, 19). This second axiom consists entirely of the three formal forms of value, not of any particular instantiation or application of them.

Third, I propose that the hierarchy of value, represented logically through the familiar primary symbolic representation of $I > E > S$, and the binary symbols

written as base and either superscripts or subscripts, can and ought to be accepted as a fundamental axiom of formal axiology.

The primary notation of $I > E > S$ can be verbally expressed as follows: Intrinsically good things are richer in value (and thus have more worth) than extrinsically good things, which in turn, are richer in value (and thus have more worth) than systemically good things.

A binary hierarchy can then be built upon this primary hierarchy to add a component which captures valuation of each of the primary values by a valuing subject. Such a binary hierarchy of valuation of values is most often depicted symbolically as follows:

$$I^I \ E^I \ S^I \ I^E \ I^S \ E^E \ S^E \ E^S \ S^S \ S_S \ E_S \ S_E \ E_E \ I_S \ I_E \ S_I \ E_I \ I_I$$

The combinatory nature of these bases and scripts is axiological, not exponential. Hartman first expressed combinations of values and valuations this way as a form of symbolic shorthand that is unique to axiology. This shorthand is explained accurately and fully by Hartman as expressions of compositions and transpositions. A composition is represented as a superscript; a transposition is written as a subscript. A composition enriches value; a transposition diminishes it. It is clearly evidenced by the ordering of this hierarchy that intrinsic valuation by a valuing subject has greater import than does the value object when it comes to determining the overall richness of the resulting combination. Next in the hierarchy are intrinsic value objects, valued more richly, in turn, by extrinsic valuations and then by systemic valuation. This same pattern then cascades through the E and S dimensions and repeats itself in mirror image in the realm of transpositions.

In a somewhat confusing practice, Hartman sometimes refers to value combinations as combinations of two value objects, such as a *new car* (E^E) rather than being combinations of value and valuation, as in *washing my car* (E^E) or *I love my car* (E^I). I prefer to adopt Forrest's (1994, 30) terminology and refer to a combination of two value objects as a *resultant*, which can then be treated as a value object. Sorting through the ramifications of this distinction and its impact on the contents of the HVP are not considered within the scope of this essay. My view that this valuational hierarchy consists of a combination of value objects and valuations by valuing subjects is in accord with David Mefford's "Meta-Axiological Patterns," or "MAPs" (Mefford, 1989).

This hierarchy need not be justified by mathematical calculation, especially not by means of exponentiation. It is perhaps unfortunate that the symbolic representation chosen by Hartman happens to be the same as that of the way we express exponents in math.

For instance, in his autobiography, when Hartman first describes the value calculus of formal axiology, he avoids reference to exponentiation and instead talks merely of value combinations. He first describes compositions and transpositions, and then writes: "Such compositions and transpositions can be systematized and

symbolized” (1994, 95). He then illustrates the shorthand symbolization with which we are now familiar, but avoids any description in this passage that would hint that such combinations occur through the application of mathematical exponentiation. Only his chosen shorthand hints at that. It’s a misleading hint.

In other words, these binary value combinations may never have been intended by Hartman to be calculated through exponentiation in the way that Forrest (1994, 2008) and others (Weller, 2009; Edwards, 2010; Richards, 2008) claim they were. From my review of the literature of this debate, it would appear that Forrest (1994, 46) is the first axiologist to insist unequivocally that the way in which values and valuations are to be combined is through exponentiation. All recent arguments about how the exponentiation of transfinite math works spring from this. Exponentiation, though, is an interpretation that has been reached by some axiological scholars; this does not make it a fact. Hartman, I argue, was more equivocal about whether his combinatorial calculus necessarily requires exponentiation. I recognize that I am going out on yet another limb here. Given the energy that Hartman (1967, 2006) dedicated to explaining the exponentiation of finite and transfinite numbers, it would be easy to conclude that he saw this as vital part of the theory of formal axiology. I point again to his equally adamant statements, already cited, that speak to the analogous nature of his argument.

In an intriguing but confusing few pages of the *Manual of Interpretation* (2006, 34), Hartman does describe his combinatorial calculus loosely in terms of exponentiation. He acknowledges that when dealing with disvaluation, this exponentiation using infinite numbers does not calculate. In a footnote Hartman adds, “The transfinite quotients have axiological but not mathematical meaning.” I interpret him to mean by this that the analogy between the logic of value and the logic of math has reached its limit here and that his discussion of exponentiation is illustrative of, but is not an essential part of, the logic of value.

Mefford introduces a new and more illustrative graphic representation of the binary value/valuation combinations which he calls the “Value Wedge” (2010, 82). He also introduces the phenomenological concept of bracketing to axiology. Bracketing is a meaningful way to distinguish between objects of value and the act of valuing by the valuing subject. Through Mefford’s bracketed form of combinatorial calculus, “the *value object* remains itself while *valuation* of the object is dynamic and fluid” (82). Although Mefford makes reference in this same essay to exponentiation, he adds that “The use of exponentiation would be only one model in formal axiology, not the last word on the subject” (82). One can readily grasp the hierarchy of value by viewing and reflecting upon Mefford’s value wedge without resorting to exponentiation at all.

This third axiom, then, defines the hierarchy of value and valuations. The hierarchy exists as an axiomatic principle, and for no other reason. It is mathematically derived only in that it is ordered from best to worst, left to right, or in Mefford’s representation, as a wedge that opens from left to right. This hierarchy is axiomatically true.

If we accept these three as the axioms of formal axiology, the implications for the theory of axiology are significant. First of all, the mathematics question shrinks to relative unimportance. If an acceptable mathematics can be found which is isomorphic with these axioms, then it will be helpful as an explanatory device. But mathematics, other than the ordering of the combinations of the hierarchy of value, is not needed for formal axiology to be a normative social science. The HVP, too, in this way, stands on logical grounds that can be tested by empirical applications. Its validity does not depend on accurately calculating the exponentiation of transfinite numbers. For the HVP to remain valid, a corollary would need to be accepted. This corollary would state that a person's value structures can be adequately and accurately described in two parts—a world view and a self view. This would place formal axiology in accord with many of the interpretive schools of social science described by Katrina S. Rogers (1996, 13-17, 36).

Controversy resolved. Or not?

4. Questions in Need of Answers

If the main premises of this essay are valid, this leaves two big questions: 1) *Why did Hartman expend so much energy on the math question?* And 2) *Why do members of the Institute consider the math question to be of such importance?*

I can answer neither of these two questions authoritatively, but would like to propose five possible reasons for Hartman's extensive writings about transfinite set theory, its relationship to the logic of values, and our subsequent intrigue with the matter. In hopes of fostering future dialogue and debate among members of the Institute about this subject, I tentatively propose the following five possibilities.

First of all, there are many intriguing parallels between transfinite math and the logic of values. Illustrating formal axiology in terms of set theory, where it does apply, can be a helpful explanatory device. Such explanations lead the reader to become open-minded towards new ways of understanding. This may be what Hartman intended to do.

Second, Hartman was an accomplished mathematician and probably reveled in exploring all of the possible analogies between the logic of value and the logic of math. He was a pioneer who pushed the boundaries of the logic of value during an era when mathematicians were pushing the boundaries of set theory.

A third factor, and one that I believe may have had a strong influence over Hartman, is that he was arguing in favor of a logic of value at a time when the scholarly community embraced a positivist paradigm of what is meant by "science." Byrum describes this well:

The paradigm of transfinite math is interesting, to say the least, but not necessary in the ultimate sense of the word for understanding Hartman. Given the popularity of these kinds of intellectual considerations in the late 1950s and 1960s when Hartman was working on *The Structure of Value*, he

must have felt that finding the parallels with his own work would give his own work a higher credibility. That he so immersed himself in the mathematical configurations is, at least, one other indication of the expansive grasp of his own intellectual curiosity. (Byrum, 2003, 5)

Scholars of positivist persuasion tend to hold that values are too arbitrary, too subjective, and too much based on preferences to be scientifically valid. Perhaps, for this reason, Hartman leaned heavily on math as a way of justifying his theory to this audience. To do so meant “to talk their talk.”

I find it of historic interest that, at about the time of Hartman’s death, scholars within the social science community began to move away from a narrow positivist paradigm and started to embrace what has since become known as a post-positivist view of social science inquiry. This shift in thinking was triggered, in large part, by the publication of Thomas Kuhn’s *The Structure of Scientific Revolutions* in 1962. Whether Hartman was influenced by Kuhn’s work is not known. But the contemporaneousness of each of their main publications is very interesting. The first of Hartman’s two major published works precedes Kuhn’s; the second one follows after. More than half a decade separates the original publication dates of *La Structura de Verdad* (1959) and of *Conocimiento del Bien* (1965). His manuscript for a revised and expanded English language version of the second book, which was published only posthumously in 2002 as *The Knowledge of Good*, remained unfinished at Hartman’s death in 1973. It may be that a careful comparison of the arguments presented in the various versions of these two books could reveal a shift in Hartman’s own thoughts over the intervening two decades. Although I have not studied them for this purpose, I am intrigued to notice a greatly reduced focus upon mathematics in *The Knowledge of Good* compared with *The Structure of Value*.

A fourth matter that needs to be resolved is what Hartman meant when he so often seemed to insist upon the value of developing a calculus of value. Is transfinite set theory essential to this calculus? I have argued that it is not. It’s an analogy; not a perfect model. Is exponentiation the proper way to interpret Hartman’s combinatorial calculus? I have argued that it is not. I have argued that the hierarchy of binary values and valuational combinations is established axiomatically. It is not derived through exponentiation. Subsequent debates over the exponentiation of transfinite numbers have become a detour from the main road that should take us towards our destination of advancing the theory of formal axiology. Is an accurate mathematical formulation of the logic of values a possibility? Perhaps. Is finding such a mathematical calculus essential to the establishment of the theory of formal axiology as a science? No, it is not.

That being said, there remains plenty of calculating to do with ordinary arithmetic, even if an axiomatic basis for the hierarchy of values is accepted. For instance, Mefford (2010, 83) argues that keener insight can be obtained when calculating scores from part one of the HVP by not combining positive and negative valences into one indicator of balance. Also, additional normative studies of the

distribution of scores amongst different populations, in the way that Pomeroy has pioneered (2005), are in order. Expanding the scope of our ability to make use of a combinatory calculus beyond the binary level as assessed by the HVP also deserves attention by axiologists. For those who wish to calculate, there remains much calculating to do.

My fifth and final speculation as to why the math question looms so large in today's discussions about formal axiology has little to do with Hartman. It may say more about us as members of the Institute today, and about our own paradigm of what makes social science a science. Are we, perhaps, interpreting the meaning of a science for the social sciences from a narrower, more American-centric definition of what makes for science than the way that science was defined by Hartman?

Edwards (2009, 163) describes well the broader European tradition of science in which Hartman was schooled. Should we be re-framing ourselves rather than Hartman's work? Are we, perhaps, conflating Hartman's emphasis on a science of values with an unfounded presupposition that science must depend upon math? Are we making more out of one part of Hartman's multi-faceted description of the logic of formal axiology than is called for? Are we reading his work through lenses tinted by our own predispositions? Does continuance of the great math debate advance the theory of formal axiology or obfuscate it? Have we, collectively, taken one possible interpretation of Hartman's semiotic representation of the hierarchy of values—that is, exponentiation—and promoted it in importance far beyond the author's original intent? I conclude that we have.

Sometimes, we must step backwards in order to move forward. In this essay I have argued that, if we return to Hartman's own writings, we can find in them a compelling argument that the logic of formal axiology is not based in transfinite math; nor in fact does it need to be based in any kind of math. While math may provide interesting ways to symbolize the logic of axiology, and while math may provide helpful ways to describe axio-logic so that people can grasp it by way of analogy, this is a far cry from saying that math is fundamental to the logic of formal axiology. The logic of formal axiology is an axiomatic logic. It is a logic that may do for the social sciences what the logic of mathematics has done for the natural sciences. Formal axiology provides a logical foundation for a science of the social sciences. The logic of formal axiology brings order to the chaos of phenomena which currently characterize the social sciences. It is a science; not a math.

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**A UNIFIED FIELD THEORY OF MOTIVATION:
BASED ON THE WORK OF ROBERT S. HARTMAN**

C. Stephen Byrum

C. STEPHEN ("STEVE") BYRUM, PhD, had the opportunity to study with Robert Hartman, Rem Edwards, and John Davis while pursuing a MA and PhD in Philosophy at the University of Tennessee Knoxville. Byrum taught at the university and college levels for 25 years, and also had a personal and family counseling practice for 22 years. He has also used the Hartman Value Profile in business and organizational settings since the late 1970s. He is the author of numerous books and periodical writings. His professional life since 1996 has fully focused on developing interpretations and applications of Hartman's work. Byrum is presently concluding his tenure as President of the Hartman Institute. He is married, has two adult children, and two grandchildren. His e-mail address is: byrum4@aol.com.

Abstract

The issue of what causes people to become motivated, engaged, and involved—to do what they do with the intensity that they sometimes express—has been a classic question that has been raised across the ages by human beings in one way or another. Of course, many variables contribute to motivation, and sorting these variables out in an orderly manner has been difficult. The task of this discussion is to find some unity around the work of Robert S. Hartman for the overall conversation involving motivation. In the process of finding focus and direction in Hartman's thought, the discussion will also look at both modern and classical contributions to motivational theory that parallel and advance Hartman's thought. In addition to several modern expressions that derive from discussions in contemporary organizational settings, the work of David Brooks and Clark Hull will be featured. The goal of the discussion is to create the image of a "unified field" of integrative factors that together drive human behavior and performance.

Introduction

I could not have been more than four or five years old. We were still living in the old rental house up next to the county high school. I had to be really young because I could still fit in the kitchen cabinet next to the stove. My mother was canning beans. By the time she finished this process, there would be a treasure trove of canned vegetables filling every nook and cranny in our house. Hundreds of glass jars glistening with different shades of green beans, yellow and white corn, and bright red, almost sweet, tomatoes. My family of two parents and four boys would empty these jars and all of the frozen foods in the big chest on the back porch over the next winter.

I loved to watch her work. She was efficient and focused in all that she did, having done most of it since she was a little girl. She was hot, especially in late summer in that steaming kitchen with the pressure cooker roaring, and—of course—no invention of air-conditioning had become a part of the socio-economics of our neighborhood. She used her apron to wipe sweat and wore one of my father's bandanas to keep the salty stream out of her eyes. She even fashioned a bandana for my head, proof positive that I was helping. Any modern time-and-motion study expert would have been amazed at the economy of her effort. No wasted movements at all.

All the time she talked and smiled and sang. When she got really focused—into her “zone” you might say—she whistled. I especially loved these times when my other brothers were occupied elsewhere. I had her to myself.

The pressure cooker itself was daunting to a small boy. It held sixteen quart jars, was filled with water, and sat on a stove burner that was turned to “high.” It was held together with steel bands that kept the building pressure of the boiling water trapped tightly inside the heavy gauge metal walls of the container itself. You always heard rumors of people who did not use the machine correctly, causing it to explode. The trembling safety mechanism that danced at the top of the container was fascinating. The pressure-reading dial bolted into the heavy lid was constantly consulted. Being that close to something that could explode in shards of metal and scalding water would have been too scary to withstand, but I had total confidence in my Mother, so no thought ever crossed my mind that would have caused me to be afraid. Even my ten thousand question spray of inquiry that found its ways into private times like this—everything from school to girls to God—did not dislodge her attention from the details of what she was doing. And how patient she always was with the interrogation that I was forever capable of mounting. She called me “the most question-asking-child she had ever seen.”

But, there was one totally serious moment that arose in our kitchen experience about which she was unequivocal and absolute: she would be moving the heavy pressure cooker from the stove four steps across the kitchen to the sink area. She described all of this movement in minute detail. She would not have time to protect me from the red-hot stove burner. I was not to move during these moments, not try to climb down out of the cabinet, not touch the burner in any way. Her explicit directions changed the pleasantness of her face to an unmistakable intensity.

She took heavy cloth towels, wrapped them in her hands and around the pressure cooker handles. The arch of her back and the strain in her body was evident as she heaved the loaded and steaming pressure cooker toward the sink. Her back was turned on me. I looked down at the red burner in front of me, considered my Mother's mandate, paused maybe a fraction of a second, spread my fingers and hand out to the widest expanse, and placed my hand directly down onto the stove (what we called) “the eye.”

It is easy to image that the scene in that kitchen rapidly and radically changed. The aftermath became complex in a lot of different ways, but that is another story.

It is also easy to imagine why I have never forgotten that day. Why did I do what I did? What *motivated* me to do what I did? *Motivation*, in any context, is a powerful and complex phenomenon.

1. Exposition

Every action starts with an idea. *Idea*, here, can be basically defined as a movement—an agitation—of cells in the brain (connections in the brain/brains synapses firing/engaged areas of the brain) that move in the direction of assembling themselves into what we would identify as a “thought.” Some of these ideas—to follow the distinctive definitions of Robert S. Hartman—as they move to thoughts and then to concepts (collections of thoughts around a basic focal point, theme, or intent) can be either “rich”—well-informed and more complete—or “poor”—not well-informed and not very complete—are relatively easy to track in terms of cause and effect, stimulus and response; others have a vagueness or depth that obliterate tracking and easy patterns of logical, rational causality. Sometimes, patterns that seemed to be easily explained turn out to be anything but. Maybe the reason I am still contemplating that day in the kitchen nearly sixty years ago is because it still does not “make sense” to me. But, one fact is for sure: sitting there in that cabinet, taking in my Mother’s language, contemplating that bright red stove burner, I was—for want of a better word—“idea-ing” (ideating). Without that movement of ideas—even the idea-provoking-impulses that told my muscles in my arms and hand to move—the stove burner would not have been touched.

Most of the motivational factors coming into play at this point—to use Hartman’s language—are *Systemic*. They are real in a particular way, but they are more abstract, conceptual, and ill-defined in terms of any actual outwardly visible activity. The *Systemic* factors in the motivational “field” that are beginning to expand outwardly here in my situation from my brain, to my hand, to the stove, and then into my Mother’s world and that of the near neighborhood—you should have heard me scream—and even that of our family and its peculiar (no doubt a good word here) history could have taken place slowly, deliberately, contemplatively. They did not. All of this particular *Systemic* part of the motivational field occurred in milliseconds. My Mother was hearing my screams before four steps had been traversed across the kitchen.

The reference to “field” and “a unified field theory” as it is used in this paper relates directly to the conclusions in math and physics, exemplified in the work of Einstein and the quantum theorists, that singular explanations are less likely to coincide with reality than multifaceted explanations that explore interactions of a wide, if not vast, array of variables. A wider “field” of explanations that focus on interactions is needed. These ideas, born in math and physics, found their way into psychology in the work of the “Gestalt” theorists such as Kurt Lewin. The word “*Gestalt*” in German basically means “whole,” so a “field theory” of human behavior would tend to take a more whole-istic approach. We are saying in this

discussion that a “field theory of motivation” will look at human motivation as a multiplicity of interactive variables; human motivation is never the result of one simply-explained variable.

In discussing the prevailing factors of the motivational field, more attention to the *Systemic* could be profoundly important in terms of raising awareness of how motivation actually takes place in stages of expanding development, or—again to use Hartman’s words—takes places in a “hierarchy of development.” A greater awareness of the *Systemic* could result, for example, in more conscious attention being paid to curiosity, deliberation, consideration, and reflection. Intention could become a more self-conscious evolving activity. Processes of idea creation might be given more time and attention. We might even be able to teach mechanisms of deliberation that would slow down the decision-making process in a way that allows that process to be better grounded. We might actually embrace as a conscious strategy stopping to smell the roses along the way, or measuring twice before we cut once. These kinds of *Systemic* factors in the overall motivational field find their way into cliché after the fact before they tend to find their way into before-the-fact strategies and prophylactics to bad judgments.

So, what were the abstract *Systemic* ideas that were agitating—albeit, obviously not well formed—in my mind? I had never done anything like that before, so I had no real experience. Maybe I had to experience something to have confirmation. You would think that the Mother who I was trusting with the potentially explosive pressure cooker would be trusted to know what she was talking about in terms of my getting burned. You would think?!? I will admit to having been rebellious, so don’t tell me *not* to do something. Had she not started that conversation to begin with, the *Systemic*, abstract, agitating “idea” might never have stirred in my mind, and the initial initiating factor of the motivational field might not have even gotten going in any stimulating manner. That assessment is probably very true, but do you want to blame my Mother for what I did in this context? Probably not.

In the multiple debriefs that occurred—the post-event narrative—after these moments in the kitchen had not resulted in loss of limbs or actual death, I was firmly instructed never to question what she said when she said “No!” in some powerful, intense manner. “Think about what you are doing!” was another element of the debrief. In other words, she was trying to get me to become more aware and more interactive with the *Systemic* dimensions of the motivational field. Just because an “idea” arrives does not mean that it has to be pursued. Not to act on the “idea” is an action itself—a choice—that might work out even better at times. Not to act might *work*—work *better* at times, be of higher value and greater worth (shades of Hartman again).

Now, let’s move back to the kitchen. There is a flurry of activity. She grabs me. She has already, in one motion, turned the cold water tap on the sink to its highest intensity. She is holding my burning hand under the stream of water and then into the pool being created in the sink’s bottom. She has reached back into the refrigerator and is pulling out plastic ice cube containers. These are being twisted

and their contents popped into the water. Four—all that we have—are used. The ice is being stirred into the cold water. “This will help,” she assures me. No blame or anger at this point for what I have done. Surprising. Every energy is focused on my hand in the cold water.

Then, my screaming becomes more logical and now is verbal in a way. The visceral screaming in pain moves to “It’s not *working!* It’s not *working!!*” In other words, the ice and cold water are not making the pain go away or diminish very much. Later at the doctor’s office, my Mother’s quick action is credited with keeping the burns from going to third degree, not even much second degree, and diminishing the likelihood of bad scarring. At the moment, however, holding my burning hand in the iced water, it was not *working*.

But she was *working*. Her next movements—without commentary—were to instruct me to keep my hand in the cold water. No questions this time. She was calling my Father home from work, quickly, which in his mind had to mean a boy is hurt and a hospital is about to be involved in his day. She was yelling to the neighbor girl who was peering in through the screened front door to get more ice from her Mother. She was in the bathroom unpacking the huge tube of Unguentine—the burn remedy of the day—and heading back into the kitchen with a roll of gauze. My hand was covered in the ointment, wrapped in the gauze, and rolled in towels of ice. We were standing at the corner ready to go by the time my Father’s car came racing into sight. Yet, all the way to the doctor, with my exhausted screaming now becoming a whimper, I was still saying, “This is not *working*.”

The second factor in the motivational field takes place when we move from the abstract—the *Systemic*—to the practical and pragmatic world of that which *works* or, as in my situation racing to the doctor’s office, does not *work*. Hartman called this arena of his hierarchy the *Extrinsic*, and it is consumed with issues of that which is efficient, effective, and even economical in concrete application—that which is tactical. In our assessment work with the Hartman Value Profile, we know that most people are stronger—and often intensely so—in the Extrinsic domain. In fact, when we look at what we call the “Self-side” of the HVP, we find that most human beings are “E-Dominant.” Most people see themselves primarily in terms of what they do. Therefore, we can conclude ahead of some significant points in the discussion to follow that the primary motivational factors in most people’s lives are *Extrinsic*, usually manifested, as we will see, in obsessive-compulsive attention to rewards, from the employee’s perspective, and performance outcomes/profit, from the employer’s perspective.

Finally, the overall motivational field includes what Hartman called the *Intrinsic*. This factor is the personal, the unique, and nothing is much more personal than pain, especially the pain of a terrible burn. My Mother might have wanted to hold me, transfer my pain to herself, and make my pain go away, but that was not going to happen. I “owned” it in the most profound way. The neighbor girl and her Mother, who came running with more ice, looked at me as if they felt sorry for me, but they also had looks—from the girl—that almost screamed out “I’m sure glad it’s

not *me*.” From the other Mother, “I’m sure glad it’s not *my* child hurt like this.” Pain can be *Intrinsic*, personal, and unique in ways that are different, but very real. The *Intrinsic* is the most real for both the person experiencing the pain and the person(s) observing the pain. The *Intrinsic*, when it moves into the motivational field as a causative factor, typically manifests itself as an even more powerful agitation or “excitement” than the agitation of ideas or the agitation of tactical action.

The “ex-citement” that I experienced during the moment of pain was beyond words, which the *Intrinsic* always is. Being beyond words did not make it at all less real, but more real in a startling manner. I may have been “engaged,” to use a word very popular in modern organizational settings, to define some degree of involvement and degree of authentic motivation, on the *Systemic* level of more abstract consideration, and on the *Extrinsic* level of what was or was not working, but those levels of engagement paled by comparison to the engagement I experienced existentially (more than rationally or practically) when the pain hit. In looking at workplace “engagement,” to have an idea about some reality is *Systemic*. To begin to inquire about how that idea might work out in real settings is *Extrinsic*. To get *excited* in a profound way about the idea and how it might work is *Intrinsic*, the fuel that will light the fire of motivation and underscore the highest levels of sustainable accomplishment. The highest levels of motivation and engagement involve agitated excitement.

Even after the pain from the burn subsided, the *Intrinsic* factors in the overall motivational field relating to this event surfaced in interesting ways. The bandages, and the story as it spread in the community, gave me attention from other people, and I readily accepted that attention while at the same time coming to clearly understand that no one would ever want to do something like this for all of the attention in the world. There was also some degree of humiliation as my brothers and friends expressed amazement at how stupid I was to do something like I did. I also was pretty certain that the similar amazement about my stupidity was becoming the lead element in the story after it was clear I would survive. Now, the looks from others seemed to be less about the poor boy in the bandaged arm and more about the insanely stupid boy who put his hand on the stove burner. Both attention and humiliation are *Intrinsic*. Sensitivity to the nuance of “looks” is also *Intrinsic*.

As time wore on, the next month brought improvement, repeated trips to doctors, bandages and treatments that restricted all-important play, and a worrisome tiredness about the whole event coming up in conversation time and again, and I was developing a truly “rich concept” around this whole phenomenon of being burned. And, it was *mine*. The scars, both real and emotional, were “brands” of my undeniable uniqueness as a radically individual human being. The richness of that concept would give me a particularly acute sensitivity to being burned, being careful with heat and fire, having empathy—a distinctly *Intrinsic* phenomenon—for others who had been burned, and passing an entire set of “values” relating to these issues on to my own children. Once some reality takes on the *Intrinsic*, motivation becomes powerful. We move beyond that which *works* or does not *work*—the

Extrinsic in the hierarchy—to that which has *meaning*, powerfully contained and concentrated sets of conceptual clusters—ideas that now have become salient memories and intricate implication-consequence markers—that are capable of driving behavior, that is, capable of motivating.

[The last half of the preceding paragraph is very important to this entire discussion. You might go back and read it again a couple of times, and perhaps even contemplate it for a few moments before moving on to the next section.]

2. Hartman's Distinctiveness

Most organizations, most individuals, and even most motivational theorists, as we will see, have focused attention on what we are calling here “*Extrinsic*” motivation. There are myriad conversations about punishment and reward, carrots and sticks, stimulus and response, seeking pleasure and avoiding pain. Only occasionally in the past several generations has there been much focus on issues such as gratification, satisfaction, or meaning, and seeing such factors as higher *Intrinsic* forms of motivation than the more common *Extrinsic*. No major theory has truly embraced *Systemic* factors of motivation.

Robert S. Hartman's axiology,¹ what he call his “hierarchy of value,” and even his Profile as an assessment tool, move beyond the common ground established by most motivational theories current in clinical psychology and in organizational psychology by allowing a more expansive and more inclusively integrated understanding of a “field” of motivation in which all three factors intimately relate to each other. To speak of three distinct dimensions of a “motivational field” is much more complete than the specializations that most motivational theories have pursued. Most motivational theories leave out far more than their narrow focus includes. Hartman's “field” approach is more consistent with and accurate to describe the complexity of fields that real human beings manifest and the myriad variables of existence that real human beings experience in the midst of daily life. We are all “menageries,” sometimes fragile glass menageries. To extend the analogy, we often feel that we are living in a unique and bizarre zoo. Only a motivational theory that relates to our complexities, both individually and in groups, will serve the need of conversations that drive decisions that will sustain us individually, sustain our interpersonal relationships, and sustain our organizations over time.

Therefore, with Hartman's axiological model, a discussion can move beyond the singular and dualistic theories of motivation that have populated the conversation to date. The most common motivation theories have been singular or, even more likely, dualistic models. Singular models focus almost all attention on one causative factor. Dualistic models, obviously, focus on two factors. Ironically, in the dualistic models, language very similar to Hartman's, but without any acquaintance with his

¹ Robert S. Hartman, *The Structure of Value: Foundations of Scientific Axiology*. Carbondale: Southern Illinois University Press, 1967.

work that I can find, is used. The most common dualistic models talk about Intrinsic and Extrinsic motivation, motivation that rises within a person, and motivation that is imposed on a person. Perhaps the absence of systemic insight keeps these models from seeing the interactions that proliferate. Variants of these models would include Skinner's behaviorism, Frederick Herzberg's two-factor theory, and most of the drive and reduction in drive theories (very Freudian) popular in the Twentieth Century. One interesting note sounded in the dualistic models is the way that the intrinsic forms of motivation tend to pale in comparison to the extrinsic by about the ninth school grade. Prior to that time, and especially in younger children, the intrinsic may even dominate. An emphasis on social acceptance at any cost, or a lessening of the role of aesthetics in the evolving child's life, may account for this clear drift toward the dominance of extrinsic motivation.

A platform can be created that can become a catalyst for understanding and discussing motivation in a new and more productive manner. The whole thought of a "field theory" suggests some sort of summative *Systemic* overview. Without the *Systemic*, as both the beginning and the end of the matter of understanding motivation, without the arrival of some initial burgeoning awareness to agitate and claim attention, and the event processing that leads to statements of "value" and "meaning," the other factors of motivation—the *Extrinsic* and even the *Intrinsic*—as they begin to take shape, probably will only occur accidentally, randomly, and in an uncoordinated manner.

Hartman's axiology can guide us to look at a number of modern formulations about motivation, most of them rising out of organizational environments, and allow us to see what theories—if the ideas are self-conscious enough to rise to the level of "theory"—have the most plausibility, and what theories can best be matched with ideas from Hartman. Which modern motivational concepts exhibit something like Hartman's field of interactive *Systemic, Extrinsic, and Intrinsic* factors? What modern theories exhibit the relative importance of the movement from *Systemic* to *Extrinsic* and finally to *Intrinsic* as a progressive hierarchy in which no part is left out and the *Intrinsic* is the consummate goal? Then, when there are coalescing matches and intersections between these modern organizational approaches and Hartman's axiology, the question can be asked whether the Hartman Value Profile could be used to place metrics around the phenomenon of motivation as a whole, and whether those metrics could be specifically applied to the intellectual constructs found in these modern concepts.

3. Popular Modern Constructs

A. Mohawk Industries

Mohawk Industries, headquartered in Calhoun, Georgia, north of Atlanta, is the largest floor covering manufacturer in the United States with a growing presence in

Europe, Mexico, Central and South America, India, and China. Many of their successes in the past two decades have been precedent-setters for their entire industry. In 2009, Mohawk named Bill Kilbride, the President and CEO of their Home Division, to the additional role of “Czar of Sustainability.” Kilbride’s primary responsibility was to make the company “green” and to diminish costs relating to waste. His creative ideas on recycling and making new products from previously used materials have been dramatic in their impact.

However, Kilbride also understands that the sustainability of a company, particularly in markets that are international in their competitive economics, has to relate more—if not first—to what it does with its people. For example, he is very concerned about the positive implications that arise when people are given the opportunity to grow and develop, when people’s health and wellness are aggressively pursued, and when people are rewarded in ways consistent with merit.

In the previous several years, Mohawk has discussed widely among its key executives what it calls “Leadership Priorities.” These, priorities are clearly seen as motivational factors and performance measures that drive success. Up until this year, the number eight (out of eight) priorities has been “Talent Management.” This terminology, to Mohawk’s credit, has never meant the kind of management of people that could be equated with raw power wrangling cats in some forced direction. In all honesty, the priority has been so far down the line from the other priorities which focused on immediate economic impact that it has garnered little attention. Because of Kilbride’s insights and influence, this year, “Talent Management” has become the number one priority, and it is being aggressively pursued. The whole idea of “getting things right” for people has gained ascendancy.

It would be easy enough to say that Kilbride has been an active voice for the power of intrinsic factors of motivation and the belief that getting the intrinsic right will lead to greater success and sustainability with extrinsic factors of efficiency and economics. However, the story runs deeper. In Kilbride’s exposure to the Hartman Value Profile, he became a serious advocate of the *Systemic*. You should see his own systemic scores on the HVP! And he has sought to hire, promote, and develop people consciously who exhibit strong systemic scores. He strongly believes that the Mohawk experience has confirmed that a person strong in the intrinsic and extrinsic domains will perform more strongly in these areas if their HVP scores are also stronger in the systemic domain. Be strong with people, see bigger pictures, and you will be better with people. Be strong with tasks, see bigger pictures, and you will be better with tasks. With systemic intention, deliberative planning, and constant debriefing, extrinsic and intrinsic accomplishments will not be random and accidental.

Steadily embracing the ideas of Robert S. Hartman more and more over the past few years, Kilbride has come to develop his own philosophy—his own *systemic* view—of motivation. He believes that in order to motivate people highly you must: (A) Give people complex tasks, tasks that will challenge, but also tasks that will provide for high levels of satisfaction and gratification in being completed; (B) Give

people as high a degree of autonomy and self-direction as possible in accomplishing high-demand, high-accountability tasks; C) Give people the chance to grow and develop, and allow them to have a voice in the direction and nature of this growth and development—Hartman’s idea that you cannot choose, create, and give the Self unless you have a known Self; and, (D) Give people compensation that mirrors effort, engagement, time, and personal energy invested—which is totally consistent with the lesser known aspects of Hartman’s work in the 1950s on *profit sharing*. It is easy to see the *Intrinsic* in Kilbride’s focus on people, and the *Extrinsic* in the results that he believes will rise in terms of productivity, quality, and economics out of this focus on people. It is equally easy to see how there is a rich overall concept of motivation and sustainable success that mirrors the *Systemic* in his complex field of judgment. *The Systemic*, so self-consciously a part of his decision-making processes, is the key to the *Extrinsic* and the *Intrinsic* being intentional.

B. Yale New Haven Healthcare System

At Yale New Haven Healthcare System, flowing down from the leadership of President and CEO Marna Borgstrom, and advanced by senior human resources executive Kevin Myatt, a linkage has been established between YNHHS’s “Institute for Excellence” and Yale University’s School of Business. In programming led by the IFE’s Jay Morris, the critical question of “readiness” has been pursued.

“Readiness” is vital whether it involves a football team taking the field for a championship game, a politician taking the oath of office, a couple exchanging wedding vows, or a soldier jumping off into a battle zone. Coaches, commanders, families, even nations—depending on the particular situation—cannot help but give substantial attention and no small bit of worry to whether *readiness* is part of the package on display in one variety and then another of social and organizational settings. The same fact is true of anyone in corporate organizations: Is a person *ready* to become part of a certain high-energy team? Is a person *ready* to meet the demands and stress common to a high-demand, high-accountability workplace? Is a person *ready* to move from a line responsibility to supervision and management? Is a person *ready* to make critical judgments and solve complex problems in the executive suite? This “readiness,” obviously, can be talked about in terms of motivation and engagement.

In the work of “The Institute for Excellence” as it is being augmented by programming in the Yale School of Business, “readiness” is specifically defined in two, mutually-inclusive ways: (1) skill set training, education, and experience; and, (2) good judgment. Organizations must assess the presence of skill sets achievement and potential further development, and the Hartman Value Profile is used to assess the presence of strong judgment and to identify areas in which weaker judgment can be improved. There is the clear realization on the part of “The Institute for Excellence” that the demands placed on people’s judgment must be met by judgment capacity or critical weak links are certain to appear, a team’s power will

be diminished, and a human being will likely be set up for failure. The results gained from the HVP are used as part of Individual Development Plans for program participants and used also to direct exactly the kind and content of programs taught by the University's professors.

Even immediate findings are almost too prolific to report in any comprehensive manner. For example, a powerful correlation exists between best performers on high executive levels that we used to construct our ideal performance templates and *Systemic* judgment scores on Part 1 of the Profile. This is not to say that the *Intrinsic* and *Extrinsic* scores were not important. Of course, they were, and any lack in these areas would certainly be detrimental. However, the high potential participants chosen to participate in the first runs of the program were fundamentally very strong in these two domains; they were hard workers (*Extrinsic*) who exhibited excellent, specific task judgment, and they were basically good with people (*Intrinsic*) in both general relational judgment and even compassion and care. They were, on the other hand, strikingly weaker in the *Systemic* when compared to already-proven executives who established the "bar" of anticipated and desired success. Substantial work began to be done to raise awareness about and improve *Systemic* scores. The leading assumption was that any and all strengths in the *Extrinsic* and *Intrinsic*, especially in situations of organizational integration, would be better actualized if there was strength in the *Systemic*.

An unexpected finding that has become more and more revealing since the inception of the Yale work is the correlation between outstanding performance relating to people, tasks, and strategic vision—I, E, and S correspondingly—when the DIF1/DIF2 relationship is analyzed on the HVP interpretations. This relationship can be described in many ways, but one critical way is how the numbers reflect a regard for externals in the world compared to a regard for internals within the Self and the personal. Another perhaps overly conventional way of talking about this relationship is "Work-Life Balance." The expression may well be conventional, but the prospect of being able to establish metrics around the phenomenon that can lead to high performance, quality, and excellence is altogether original and totally fascinating. We are even ready to conclude that one of the most powerful predictors of success on executive levels of organizations—and, by extension, in any endeavors of high demand—is this "Work-Life Balance" mirrored in strong DIF1/DIF2 numbers.

With the first class of high potential performers in the Yale program, the RHO score on Part 1—the work side of the Profile—was .924. This is an incredibly strong number which gives an overall view of the strength of work judgment and evaluative clarity that will accompany skill set mobilization with these individuals. On the other hand, the Part 2—self side—RHO average among these initial participants was .570. The template, based on already highly successful executives, called for a number somewhere in the range of .850 and above. The initial participant group was not even close, and their true and most vivid vulnerability was exposed.

A variety of responses were made to this situation including course work, mentoring, and one-on-one coaching. The first objective was to raise awareness, and then to suggest some prescriptive activities that might bring improvement. There was *never* the problem of participants arguing with or discounting results. Results, admittedly and even confessionally, were seen as being right on target. One participant directly said to me: “You’ve been talking to my Mother. You could not know this much about me.” As it happened, his Mother did work within the organization, but no conversation of any kind had been had with her. In fact, I have yet to meet her.

Remarkably—but maybe it is not remarkable if you can really gain people’s attention—at the end of the six month program of emphasis, when the HVP was retaken as a post-event measure, the RHO scores on Part 1 had barely moved, but the RHO scores on Part 2 had moved from an average of .570 to an average of .720. This is pretty profound. Not enough of a movement to be sure, but a movement in the right direction that is continuing to create its own snowballing effect and momentum. It will be interesting to see where these scores are in a year.

Even more remarkably, to me, was the “graduation” event for the first participants. All of the Yale “brass” was there to see what was happening. They had already been hearing rumors. Toward the end of the program, each participant stood and talked for a few moments about the experience. Often the conversations were carried out with significant emotion. To a person, there was the reflection that this had been one of the very best programs of development and preparation that they had ever experienced. Several participants talked about reclaiming something of their relationship with families, with themselves, and even with what they identified in their own ways as “The Divine” in their lives.

Without question, “The Divine,” is a troubling construction, not nearly as obvious to people who think it/IT is obvious than it actually is when examined closely, and not nearly as capable of being casually dismissed by those who form almost a psychologically weak base of denial around the haste of their dismissals. At the very minimal, when people are talking about “The Divine,” especially when it almost seems that their use of the term is coming as a surprise to them, it becomes clear that some deep personal recesses of examination are being opened—in ways that no available language is adequate to express, so an almost regressive movement to old languages becomes the only option. This profound sense of “connection,” for want of a better word, was unequivocal in the entire room and perpetuated the meeting as it turned to a deliberative quietness that seemed to surprise almost everyone in attendance. The role of such moments of “connection” in motivation is yet to be clearly understood, although David Brook’s work will help us later on. “Connection” becomes something of a synonym for a kind of agitation, excitement, and engagement that is critical to motivation.

There is also probably some underlying interrelationship in the scores being emphasized at this point. The ability to see *Systemic* bigger pictures is likely to have some sort of integral relationship to seeing the importance of “Work-Life Balance”

in all of its particular manifestations from self-care to family alignment. In like manner, the real establishing of “Work-Life Balance” may become a mechanism for getting people above the entanglements and distractions of day-to-day obligations, and helping them to create exactly the kinds of spaces and experiences in which *Systemic* judgment can develop. To date, “Work-Life Balance” in most organizations has been seen as “soft side stuff,” hardly worthy of organizational time and expenditures of money. With the imprimatur of these *Yale* studies, the entire consideration that has caused self-side issues to be of less concern might begin to change, and the use of the HVP might be expanded again to yet new horizons.

C. Mayo Clinic

At Mayo Clinic in Rochester, Minnesota, an entire department of physicians and social workers is concerned with “return to work” issues. While the world-famous institution is certainly concerned primarily with treating illness and restoring health and well-being in innovative and creative ways, there are also wide varieties of programs designed to work with individuals beyond diagnosis and treatment as they move toward recovery and reclaiming the vitality of both physical and lifestyle sustainability. A significant aspect of recovery for many individuals is getting back to their work and the important dimensions of self that are defined by work. In addition, return to work is a major issue of concern for health insurance companies, disability providers, and the expensive worker’s compensation plans provided by many employers. Our work with the HVP, guided by the expertise of Dr. Ken Mitchell, a nationally known figure in the field of return-to-work research, has focused on what HVP scores can tell social workers, back-to-work counselors, and case workers about an individual’s motivation. The tool is also becoming a platform for discussions that help individuals who have experienced some sickness, injury, or medical malady to understand better the strengths and weaknesses of their own motivation.

A field of scores that involves *Intrinsic*, *Extrinsic*, and *Systemic* indicators in combination with each other has allowed both practitioners and patients much clearer understandings of motivation, and especially—in my opinion—clearer understandings than are available in one-dimensional or dual-dimensional theories of motivation. The metrics of HVP interpretations have given case workers predictive clues that allowed them to become more comfortably pro-active in the program of interactions they follow in approaching patients. Case workers actually know what kind of motivational factors patients are likely to bring to their medical circumstance, where patients stand in regard to their present sense of motivation, and what kinds of strategies are likely to be most appropriate in positively motivating patients toward more successful outcomes. That a particular patient’s judgment at any given time would have direct implication for that patient’s motivation, or that motivation is somehow related to a patient’s values, would be

fully consistent with Hartman's overall axiology and his understanding of how values and evaluative judgments drive—motivate— behaviors.

Interestingly enough, patient motivation falls into four fairly distinct categories, and these different categories exhibit fairly distinct HVP score ranges relating to distinctive indicators that have risen to importance in our research. The ranges reflect these distinctive motivational patterns are: (1) persons who seem to be well-balanced in scores relating to motivation and exhibit fundamentally normal and basic recovery curves; (2) persons who seem to be aberrantly motivated by a tendency to “game” the system and stay away from work—to gain compensation and disability support as long as possible; (3) persons who may, in fact, be overly motivated and will return to work too early, thus creating new complications and being destructive of a more well-balanced recovery; and, (4) persons who may have never been sick or injured before, never had to confront the specific situation they are in, and are caught in what Ken Mitchell calls a “malaise of indecisiveness.” These people, to use his most simple, direct, and most descriptive terminology, are “*stuck*.” The entire concept of motivation as it relates to each of these four distinctive groups of people is very different, depending on which group a person seems to fall into. It is powerfully compelling and interesting to see the large percentage of people he has worked with across the years who fall into the malaise of indecisiveness, the *stuck* group.

Mitchell typically responded to these four groups anecdotally. He has seen common characteristics of each group and has appropriately directed case managers in their response training. The only problem, of course, is the time element involved in anecdotal diagnosis and the overall precision of that diagnosis. The beauty and power of the HVP rises in the correlations that we have been able to demonstrate between scoring patterns and these four categories of motivational response to maladies suffered and return-to-work implications. While the work is still “in progress,” having a base of information that creates a more reliable and insightful response on the part of case managers gains high praise from the “frontline” workers. Most often in our experience, they are very caring workers who certainly try to save companies money, but they are also trying to help people find their ways through what is often troubled and uncharted waters in their lives.

While the work has not been done as yet, it would be very interesting to see how the general population exhibits motivational characteristics relating to these four return-to-work categories. A large number of the present population, impacted by the variety of stressors, obstacles, and challenges that accrue to life at the beginning of the 21st Century, may fall into the category of the “malaise of indecisiveness *stuck* group.” In this microcosmic setting, led by Ken Mitchell, we might be able to learn how to raise awareness, create platforms that are beneficial catalysts for discussion, and identify concrete strategies that address a macrocosm of situations not foreign to most modern civilizations, (if “civilization” is still a viable world).

D. Electric Power Board of Chattanooga

Harold DePriest is an interesting man to say the least. For a corporate CEO, he is unassuming and unexpected. Born in a small rural community in West Tennessee, he rose through the ranks to become head of the Electric Power Board of Chattanooga. Thinking of the EPB across the Mid-twentieth Century, it would be fairly appropriate to see it as a sleepy, mid-sized, Southern utility company that basically keeps electric power available without any frills or much of a name for progress. The EPB today occupies the most modern new building in downtown Chattanooga; it is a business that has redefined itself beyond any paradigms generally associated with local utility companies. Its advances, for example, in fiber optics technology, moved the City of Chattanooga and EPB's surrounding service area about five years beyond most utility companies in the United States. That advantage helped bring Volkswagen, Amazon, the power generating conglomerate, Alstom, and the solar cell giant, Wacker, to the area in the past three years. DePriest's vision and insights, working through EPB, has had dramatic economic and human effects, in terms of jobs and opportunities, on the entire region.

DePriest's reasoning behind the success of EPB, and the primary motivating factor in his own leadership agenda, is fairly simply to explain: give people the opportunity to succeed. He sees the experience of success as the primary factor of motivation. "Nothing succeeds," as the old saying goes, "like success." Create a situation in which people can experience the personal feelings that rise from successful endeavor, and the most powerful catalyst for higher success will be forcefully in place, and a snowballing extension is almost certain to occur. Motivation, engagement, and involvement are the result of momentum, and momentum is created by wrapping people in the experience of success.

While the concept is expansive and highly systemic, how the process works out in day-to-day manifestations shows the disciplined human side. Each person must have an opportunity to experience success at his/her own level in the organization. Activities that spell success for linemen working to repair power outages caused by a storm are not the same as those that spell success for persons in sales to new businesses. DePriest's job may be to bind diverse work and workers into larger, aligned and synthesized wholes. This very human individual focus is empowered by compliments that motivate giving personal energy to whatever the specific task at hand might be. DePriest's leadership mandates affirming success with compliments, ranging from reaffirming the smallest task done well to the asserting that no task is incidental or inconsequential to the success of the larger whole, consciously reaching to both the microcosm and the macrocosm of the organization's efforts. Great care is taken in the discipline associated with criticism and the use of negative reinforcement because both realities—misapplied—can quickly thwart enthusiasm, commitment, personal energy, momentum, and powers supporting motivation and engagement.

Criticism and compliments are profound realities, and the metrics of the Hartman Value Profile shows that they have dramatic impacts on Self-esteem/confidence, Self-concept/role satisfaction, and Self-image/motivation. Importantly,

there is at least a 5-to-1 if not a 9-to-1 ratio between the number of compliments needed to offset one action of criticism, especially if that criticism is delivered by the wrong person at the wrong time with unreasonable and unwarranted energy. These ratios have been famously suggested in research and presentations advanced by the corporate research group, The Center for Creative Leadership, in North Carolina.

For example, only one team will win the NCAA basketball tournament, and only one person will win the Master's golf tournament. This means that every other team in the basketball league and every other person in the famous golf event will lose. Criticizing certain plays or club selections that led to defeat would be altogether too easy, as would focusing criticism on some moment when lack of focus or less-than-perfect judgment caused a poor decision to be made that negatively impacted the outcome of the basketball game or the golf match. Perhaps some team made it only into the "Elite Eight" (final NCAA basketball grouping) before losing, or some player might not have made the cut to play on Saturday and Sunday at Augusta. It all begins to sound like everyone is a "loser" deserving substantial criticism unless there is the ultimate success of a singular win.

On the other hand, in DePriest's view, most golfers, for example, would be more than happy and worthy of congratulations, if they were able to shoot in the mid-80s on their local courses. I am delighted with the success I have had across the years in outscoring my brothers when we have played. In fact, I am delighted to have five Master's flags in my study, items bought in a gift shop which prove that I have seen the matches at Augusta five times in my life. It is a great experience of success that I feel very gratified about just to have walked on the same ground as Tiger Woods, Jack Nicklaus, and Arnold Palmer. The dream of a lifetime would be fulfilled just to play on the course. Success, compliments, and resulting motivation occur on many, many levels. Showing people how they can be "winners" without having their names inscribed on some trophy can have profound implications, as can not suggesting that some lack of perfection made a person a "loser."

Build on success, give opportunities to see actions in terms of success, and the chances of advancing higher successes are greatly extended in a positive manner. Understanding these dynamics as they apply to running an electric utility allowed DePriest to create one of the most forward-thinking and forward-moving organizations of its type in the United States. Consciously helping people to experience success is a powerful catalyst to further success, to building mutually supportive teams that people are proud to be part of, and to achieving intrinsic forms of gratification that extend accomplishments far beyond extrinsic forms of reinforcement such as pay or title.

4. The New Work of David Brooks

David Brooks has been well known on the American political scene since the middle 1960s as a journalist, writer, and television commentator. His work has been

featured in *The Wall Street Journal*, *The Weekly Standard*, *Newsweek*, *The Atlanta Monthly*, and now in *The New York Times*. Brooks is a regular panelist and contributor to *PBS News Hour*. A self-styled “liberal” early in his career, he would likely be described as a “conservative” today. He has, however, never carried labels very well. He is known by most political figures, right and left, as a highly reasonable man with significant writing talents and a great ability to see through general political stereotypes. He famously supported John McCain in the 2008 Presidential campaign, but he adamantly opposed Sarah Palin, calling her a “joke” and a “cancer” on the Republican Party. He has published numerous articles that express his positive feelings for Barack Obama, including a *New York Times* piece entitled “Run, Barack, Run,”² where he wrote, “Usually when I talk to senators, while they may know a policy area better than me, they generally don’t know political philosophy better than me. I got the sense that Obama knew both better than me.” His most recent book, on which this section of my discussion is built, is entitled *The Social Animal: The Hidden Sources of Love, Character, and Achievement*.³

Brooks’ initial consideration in writing the new book arises from his vision of four political failures that had a huge impact at the beginning of the 21st century. While these events are abundantly well-known, Brooks’ insight into them is anything but the standard political and historical interpretation. First, after the fall of the Soviet Union, the United States government sent in teams of the most brilliant economists to understand what had taken place and what future might be available. The economists, in their studied brilliance, failed to see that the real problems of the Soviet Union were not money or economic theory—the latter being in most stereotypes of everything “Soviet.” Instead, Brooks believes, the true issue was a “lack of social trust”⁴ between people that had much more dramatic consequences than any traditional economic paradigms.

In his second consideration, Brooks looked at the aftermath of the invasion of Iraq and what he now sees as an inevitable “after the US presence is gone” collapse of Iraq as a viable nation, even though he initially encouraged the attack from a position not unlike many prominent neo-conservative war advocates in the United

² David Brooks, “Run, Barack, Run,” *The New York Times* (October 19, 2006). This article was written following the publication of Obama’s book *The Audacity of Hope*.

³ David Brooks, *The Social Animal: The Hidden Sources of Love, Character, and Achievement*. New York: Random House, 2011. Two major articles by Brooks timed to appear near the new book’s publication date are used in this section of my discussion: “The New Humanism,” *The New York Times* (March 7, 2011) and “Social Animal—How the New Sciences of Human nature Can Help make Sense of Life,” *The New Yorker* (January 17, 2011).

⁴ *Ibid.*

States government. At the beginning of the war, we understood the military dynamics of an invasion and temporary control of a county's post-war direction, but we were generally without insight into the cultural complexities of an expansive diverse nation, its cultural and religious uniqueness, and the psychological aftershocks of the rampaging terror of Saddam Hussein that had gripped a people's lives for more than a generation.

His third consideration is the banking crisis that continues to threaten the economic substructure of the United States. Brooks believes that our country was deluded by "the notion that bankers are rational creatures who would not do anything stupid en masse."⁵ He moves back to the old Cartesian misconception that human beings are divided creatures who are part rational and part emotional, and that it is our task to subdue and push back the emotional—as with Freud—so that the sacred rational can dominate. Suppressing the passions and the emotions, a form of personal and organizational denial, leads only to a lack of understanding, and then to a lack of the usefulness of passion and emotion. The roots of motivation are misunderstood and misused at the vortex of this misunderstanding and lack of appreciation.

Finally, and perhaps at the core of causative factors that result in all three of these focal crises, Brooks looks at the modern educational processes in the United States that have focused on "traits measured by grades and SAT scores."⁶ We have tried, he says, to give attention to all different kinds of educational formats and tactics, but we have forgotten the most salient issue of all—"the relationship between a teacher and a student,"⁷ and the way in which the kind of *connection* that rises in authentic relationships has much more to do with motivation than any rational tactics, schooling format, or grade metrics. What we have failed to master and even marginally appreciate is the power and art of *connection*. [This last sentence is very important. Please reread it carefully before moving on; take a moment to contemplate its meaning and implication.]

We are trapped within what Brooks calls an "amputated view of human nature"⁸ in which

we emphasize things that are rational and conscious and are inarticulate about the processes down below. When it comes to the most important things like character and how to build relationships, we often have nothing to say. Many of our public policies are proposed by experts who are

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Ibid.*

comfortable only with correlations that can be measured, appropriated and quantified, and ignore everything else.⁹

We are consumed—if not even “addicted,” to use Robert S. Hartman’s term, with that which is Extrinsic and Systemic, and we neglect to our ruin the Intrinsic. We fail to recall Einstein’s injunction that those matters which we can count tend to *count* least, and those matters which we cannot count tend to actually *count* the very most.

However, in all of what is beginning to sound more than pessimistic, Brooks finds a brighter and more optimistic light. He believes that modern brain science may help “fill the hole left by the atrophy of theology and philosophy,”¹⁰ and—we could easily add—modern psychology, especially the personality trait theories of the past two generations that have captivated the attention of human resource applications in organizational settings. While the concept of “atrophy” as it applies to theology, philosophy, and psychology is not very appealing—especially to theologians, philosophers, and psychologists—this may be a strong wake-up call to members of these professions, who tend to avoid the fact that their present message is generally discounted by society as a whole, especially the coming generation. A rediscovery, albeit by brain scientists, of what Brooks calls “the processes down under” might even reinvigorate theological, philosophical, and psychological discussions, since at times these professions have had a great deal to say about these arenas of concern. Brooks outlines key insights from current brain research, especially that the unconscious parts of the mind are most of the mind. (Of course, the unconscious may simply be the unarticulated-as-yet, and the Hartman constructs may allow for a new articulation that has not been utilized as yet. Until some reality is articulated, it is essentially unknown, thus cloaked in a mysterious aura that makes it fundamentally unusable. Hartman brings articulation and brings the previously “unknown” into a stronger light.)

Emotion is not opposed to reason, but our emotions assign value to things and are the basis of reason. Here, the Hartman structures may be of considerable help in articulating the dynamics of the relationship between values, valuation, and evaluative judgment as substantive causative drivers in shaping what is normatively called “reason.” With the Hartman constructs, both the content and processes of *reason* can be articulated much more distinctively. The Hartman Value Profile provides metrics that allow for an entirely different and additional mechanism of measurement that moves beyond the traditional measures that Brooks is sure are not working. The idea that emotions assign value in a way that becomes the basis of that

⁹ *Ibid.*

¹⁰ *Ibid.*, 27.

which is called “reason” is very compelling, one perhaps best explored in axiology as opposed to other, more traditional, academic disciplines.

We are individuals who form social relationships. We are social animals, deeply interpenetrated within one another, who emerge out of relationships. At this point we come to Hartman’s *Intrinsic*, the epitomizing point of his axiological hierarchy of value. The lack of articulation about and appreciation for the *Intrinsic* holds us at an amateur point of sophistication in its utilization.

Brooks concludes “The New Humanism” by stating that the synthesis of the new brain research allows for “different perspectives on everything from business to family to politics. You pay less attention to how people analyze the world but more to how they perceive and organize it in their mind.”¹¹ In fact, how this organization takes place may become that which we refer to as “the mind.” The entire concept of perception and organization as it relates to mind is distinctly paralleled by Hartman’s central concept of a *structure* of value.

These considerations will lead to an entirely new understanding of what we have loosely called “human capital” and the entire issue of “talent management.” No longer will we simply define “human capital” narrowly as IQ, educational degrees, and professional skills. Now, we will focus on “a range of deeper talents.”¹² Jim Collins already sensed these distinctions when, in *Good to Great*,¹³ he stressed that the ideal “right person in the right seat on the bus” would be the person of the *right* skills (degrees, professional training, IQ) and the *right* values. The values part has been lacking in articulation, and especially the way in which values are manifested in judgment. Collins himself leaves this point vague. The connection to Hartman is more than obvious to those who have studied Hartman’s work, and Hartman brings amazing clarity to Collins’s vagueness about values. The connection to Hartman’s work being made for others, meshed with conversations like those of Collins and Brooks, is the challenge of those of us who follow Hartman’s philosophy.

Brooks feels the need to invent almost a new language¹⁴ in order to talk about the “deeper talents” that stand beyond IQ, academic development, and professional training. It would be very easy, following Hartman, to describe these “deeper talents” as *value* talents, *evaluative* talents, or *axiological* talents such as the following:

Attunement—the ability to enter other minds and to learn what they have to offer. Here is Hartman’s entire emphasis on “integration.” Indicators such as DIF1, which

¹¹ Brooks., “The New Humanism.”

¹² *Ibid.*

¹³ Jim Collins, *Good to Great: Why Some Companies Make the Leap and Others Don’t*. New York: Harper Collins, 2001.

¹⁴ Brooks, “The New Humanism.”

looks at a person's ability to notice nuances and that which is subtle, and DIM-I, 1, which looks at a person's ability to be open and tolerant of others, could be important measures. Elsewhere,¹⁵ Brooks talks about the ability to understand and inspire people. He calls this ability a "trait," but I am not sure that "trait," commonly understood as some sort of inbuilt aspect of "personality," is an adequate word. If it means some sort of evolved capacity, it may be acceptable.

Equipose—the ability serenely to monitor the movements of one's own mind and correct for biases and shortcoming. The entire self-side of the Hartman Value Profile comes into play at this point, with particular emphasis on self-esteem indicators. In addition, the DIM measures that reflect the presence or absence of serene reflective ability would also be vital. On the DIM measures, most people score poorly, especially on the self-side; that is, serene reflection is highly exceptional as a disciplined process in most people's lives.

Metis—the ability to see patterns in the world and derive a gist from complex situations. This involves the entire Systemic, the arena where critical weakness is observed in most HVPs. Elsewhere,¹⁶ Brooks talks about the ability to imagine alternative futures, which is also distinctly Systemic. The INT%,1 helps define the energy present for this kind of imagination, and the way in which much of this specific energy is snuffed out by the tensions and stressors common in modern organizations, even in modern society as a whole. Imagination, as understood by Brooks, is seen as "the ability to blend disparate ideas and make sense of the environment in subtle ways."¹⁷

Sympathy—the ability to fall into a rhythm with those around you and thrive in groups. The INT-I, 1 plus all Intrinsic indicators would be important to measure this dynamic. Elsewhere,¹⁸ Brooks talks about the ability to build trusting relationships. The three balance indicators on Part 1 of the HVP are critical indicators in this regard.

Limerence—motivation, and particularly the kind of motivation that arises within people in their pursuit of more transcendent realities such as meaning, gratification, and satisfaction. The term "limerence" is an invention of psychologist Dorothy Tennov, first seen in her 1979 book entitled *Love and Limerence: The Experience of Being in Love* published by Scarborough House. The word hints at the experience of attraction, attachment, infatuation, and attentiveness directed at a person or object. It includes also the sense of connection or bonding of an existential sort that

¹⁵ Brooks, "Social Animal," 27.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

embodies authentic relationships. Attachment issues early in life could create problems with achieving healthy limerence later in life.

Brooks makes a great deal out of a person's "deeper talents" to connect, attach, and bond as being equally important—if no more so—than traditional academic and professional skills. The German word "*zwischenmenschliche*" is important here as well. The word means "between-ness," a kind of intrinsic interrelatedness that can occur between people or even, aesthetically, between people and objects. This kind of relatedness is highly existential and is a "felt reality" more than a discursive reality than can be defined by logic. The development of this capacity for and ability to advance "connected-ness" has a parity of importance with, if not greater importance than, skill set development. The highest forms of drive, passion, and commitment will come from this kind of motivation. The PosS/NegS, 2 indicator comes into play at this point, along with DIM-I,2 and DIM-E,2.

The word *play* does not occur haphazardly here. It is used in keeping with the ideas advanced in my doctoral dissertation, *Intrinsic Value and Play*, Knoxville: The University of Tennessee, 1975. Play, and especially the concept of "child's play" advanced in the Greek word *paidia*, is a primary form of intrinsic valuation experience. Such experiences epitomize and enhance the highest levels of *human* experience. Our problem is that we have lost a great deal of the ability to play and have fun. Instead, to use Hartman's insights, our lives have become filled with boredom, ennui, angst, and dread. Brooks says,

We live in a society that prizes the development of career skills but is inarticulate when it comes to the things that matter most. Young achievers are tutored in every soccer technique and calculus problem, but when it comes to their most important decisions (evaluative judgments)—whom to marry and whom to befriend, what to love and what to despise—they are on their own.¹⁹

Brooks looks upon his terminology, not as something that is sacrosanct, but as a language that becomes a platform and catalyst for discussion, much in the same way that Hartman places value on being able to "talk about" as opposed to imposing rigid definitions. Just as Freud introduced *ego*, *id*, and *superego*, and gave human beings a new way of talking about the Self, the constructs of Brooks can serve a similar function. Hartman's work can bring substance and, I believe, measurability to Brooks's constructs.

A critical distinction for Brooks is the difference between what he calls "mental strengths,"²⁰ which primarily relate to the processing power of the brain of basic

¹⁹ *Ibid.*, 17-18.

²⁰ *Ibid.*, 28.

knowledge and information, and “mental virtues,”²¹ which lead, in his configuration, to “practical wisdom.”²² These “strengths” come very close to Hartman’s understanding of the way evaluative judgments work in the general extrinsic and systemic domains. The “virtues” come very close to the intrinsic domain, the epitome of the value hierarchy. Clearly, Brooks sees the “strength” arena to be incomplete, even stillborn, until the “virtue” arena comes to manifestation. At one and the same time, “virtue” is the driving goal and the ultimate outcome of “strength.” As with the ancient Greeks, *techne* (*skill sets*) is epitomized in *arête* (character).

Using the Hartman Value Profile, it might also be possible to measure strength-virtue. Part 1 of the HVP manifests insights into the “strength” side of judgment, and Part 2 manifesting insights into the “virtue” side. The entire process could be further elucidated by viewing “strength” through both Part 1 and Part 2 scores, and “virtue” through the underlying “Balance Indicators.” Both Hartman and Brooks understand the unequivocal necessity of “mental strengths” issuing in and being guiding forward by “mental virtue.” Hartman always wanted to see conceptual engagement issue forth in real-life engagements of practical applied wisdom and evaluative judgments, but this real-life engagement is not likely to take place with its highest intensity and potentials unless *what* someone does is empowered by *who* someone is. Self-giving, the highest potential accomplish for human beings in Hartman’s schematic, is accidental and randomized unless it is well-grounded in Self-knowledge and conscious Self-creation.

Brooks looks closely to the work of University of Toronto psychologist, Keith E. Stanovich, whose book *What Intelligence Tests Miss*, established the core insight that “thinking dispositions” (Brooks’ “mental virtues”) correlate weakly or not at all with IQ.²³ This insight is central to revealing why the Hartman Value Profile is a much better predictor of performance and relational outcomes than IQ tests. While an IQ type of intelligence and mental strengths can certainly be enhanced by traditional academic, professional, skill set education, the thinking dispositions or mental virtues cannot. These can only be fostered by understanding and advancing the deeply human phenomenon of connection (the existential reality of *zwischen-menschliche* or “between-ness” which is at the essential core of authentic *Dasein* (Being-there), authentic existence, as footnoted earlier). Without the ability to experience and practice of experiencing the full gamut of the phenomenon of connections, the capacity to practice mental strength in ways that result in mental virtue or guided practical, applied wisdom, is thwarted. Modern education focuses intensely on fostering mental strength but very little on fostering mental virtue.

²¹ *Ibid.*

²² *Ibid.*

²³ *Ibid.*

Therefore, we know a lot of “stuff,” but we know so little about connections that *what* we know is little touched by or little touches *who* we are. Very little of what are taught interacts with and has consequence for the *who* dynamics of the human condition and the world in which human life is lived economically and environmentally—two of the primary constructs of the real world in which human life is conducted.

If we were to learn how to experience and appreciate connections through *play*, for example, consider how quickly we would remove aesthetics from the usual educational process where play becomes *agon* (battles to be won, a means to an end) as opposed to *paidia* (fun to be experienced, an end in itself). Today’s primarily extrinsic education has become something very different from the Greek goal of *paideia*. How interesting, after a generation, that several leading preparatory schools in the northeastern part of the United States have dropped AP (Advanced Placement) courses from their offerings, believing that they do more harm than good for the educational process and the overall maturing of their young students.

Again, we will emphasize what Brooks saw as these “thinking dispositions,” these “mental virtues”: (A) understanding people, (B) inspiring people, (C) reading situations, (D) discerning underlying patterns, (E) building trusting relationships, (F) recognizing one’s own biases, (G) correcting for one’s own shortcomings, and (H) imagining alternative futures. Our understanding of every one of these capacities/abilities can be advanced by the axiological constructs of Robert S. Hartman and measured by his Profile.

Finally, Brooks gives attention to the way in which this whole phenomenon of connection, *zwischenmenschliche*, is conditioned, in terms of its potential for establishing a ground of be-ing for all other connections, by the kinds of attachments we forge initially in our lives (or have forged for us), by the awareness of and attitude toward attachment that move through our lives early on from adolescence to young adulthood, and by the choices we make about attachment as we create attachments in our adult lives. He is greatly influenced by the work done at the Swiss Center for Affective Sciences at the University of Geneva by Pascal Vrticka and by research being done currently on attachment patterns at the University of Minnesota. Vrticka is a new voice in brain research, having received his PhD in 2009. He describes his field as “Social Neuroscience,” and he makes great use of MRI imaging and EEG scanning. His research has established connections between human attachment and the formation/functioning of the amygdala. He is convinced that a great deal of dysfunctional behavior and inability to perform tasks successfully relate directly to attachment problems occurring very early in human experience.

Brooks believes that these connections can occur on multiple levels at the same time, and the more connections, the greater the density and sophistication of potentialities that persons will attain in their lives if they are “awake” (as in Buddhism) to and prepared for the connections that become available (or, to follow Heidegger, that *arrive*). “Density” is a special word to me. My great teacher, Rolf-

Dieter Herrmann, with whom I studied at the University of Tennessee in Knoxville during the same time that I studied with Hartman, walked across most of Western Europe when he was a college student. Late one afternoon in the south of France, he walked into a small restaurant only to find, as the only other customer, Pablo Picasso. Herrmann could not resist approaching Picasso and found him to be totally engaging. Before they parted company, Picasso took the back of a large menu, drew a mark across it, and signed his name. Herrmann kept this “painting” across the years in a safe deposit box and planned to use it to finance his sons’ educations. When I asked how a line could have value, he responded: “No one could draw a line with the *density* that Picasso could place into a line.” The artist’s signature was of value, certainly, but nothing like the value of the *dense* line/work of art.

Brooks talks about how life becomes, for those who are “awake,” like the *flow* of a great river. Connections create and are experienced as “flow,” and one is immediately reminded of the profound work of Mihaly Csikszentmihalyi.²⁴ But a person cannot experience this flow as alive with connections unless connection/attachment/*zwischenmenschliche* has been part of that person’s life in a healthy, maturing, and sustained manner. Healthy connections are fostered and manifested in realities as simple and profound as kindness and appropriate affection/touching. Keep in mind the concept of “*marasmus*,” disability caused or exacerbated by lack of affection. Unhealthy connections lead to avoidant attachment patterns, isolation, perhaps a general lack of empathy, and even the potential for violence.

Brooks provides several, interesting definitions of how this overlapping, interactive flow of connections can be encountered. These definitions allow for the advancing of conversations that can expand our personal, relational, and world environmental consciousness:

Genetics—information that flows deeply within us from our evolutionary past.

Culture—the information passed along from hundreds of years ago, which may defeat or at least challenge the way in which organizations talk about “culture” as if it is some particular set of traits or characteristics that an organization can establish as a kind of corporate identity. True culture, identity, and tradition cannot be produced like a merchandizing jingle. A great deal of what organizations call “culture” may be more in line with what Brooks would define as “stagecraft.”²⁵

Family—information passed along from decades (in traditional families or in family-like experiences in teams or in combat units in war).

Education—information passed along from months.

These four categories of the flowing river of connections that inform life could have interesting implications for considering the entire field of motivation. If individuals could discuss and define the degree to which each category had an

²⁴ Mihaly Csikszentmihalyi, *FindingFlow: The Psychology of Engagement with Everyday Life*. New York: Basic Books (a subsidiary of Harper Collins), 1997.

²⁵ Brooks, *The Social Animal*, 323.

impact on their life directions and critical life decisions, it would be easier to know what motivates each one. If we could understand where people spend their time and attention, it would be easier to say with clarity what creates motivation, engagement, and basic foundations for achievement.

Ultimately, for Brooks, what is at stake is human happiness itself. Perhaps there is truth in the old thought that the best worker, or the best partner in a relationship, or the person who might become the being a human being—is the happy worker/happy person. There is clearly a direct relationship between being connected and being engaged, motivated, and embraced by achievement and happiness. Or, there is clearly a direct relationship between being happy and connection, engagement, motivation, and achievement when sustained over time in a consistent and intentional, as opposed to accidental and random, pattern. To some extent, happiness is contingent on the information we possess, our awareness and appreciation of it, and the way that it translates into skills—or the way that it translates into all of the kinds of connections that inform skills. To a further extent, happiness is contingent on how we personally connect with other people, with our own Selves, with our physical environment, and with that array of realities (for us) that we term “Absolutes.” These deeper or higher priority connections determine the viability and efficiency of the lower-level more practical connections that translate into skill-set accomplishment and skill-set excellence.

“I’ve come to think,” says Brooks, “that happiness isn’t really produced by conscious accomplishments. Happiness is a measure of how thickly (“densely,” to follow Herrmann) the unconscious parts of our minds are intertwined with other people and with activities. Happiness is determined by how much information *and* affection flows....”²⁶ He is back very close to Aristotle’s concept that happiness is “activity of soul in accordance with virtue.” Virtue—*arête*, character—for both Aristotle and Hartman is bound up with our own particular uniqueness (both as it is discovered, advanced, and discovered while advanced). Virtue is intrinsically related/connected to the very core of motivation, engagement, and achievement; look at the subtitle to Brooks’s book. It is hard to conceive of motivation and engagement on very high levels of intensity without happiness, without virtue, or, following Hartman, without *goodness*—especially as manifested in rising toward the fulfillment of our own potentials, our own concepts of Self informed by the connections of our existence.

The ultimate level of achievement, engagement, and connection is action. Now Brooks quotes Aristotle: “We acquire virtues by first having put them into action.”²⁷ Action is the ultimate connection because it involves real doing in real life. Real, existential action, despite what Aristotle once said about happiness as contemplation, is a purer form of connection than conceptually contemplating

²⁶ *Ibid.*, 32.

²⁷ *Ibid.*, 128.

action. (Aristotle saw contemplation, not as passive engagement, but as a highly disciplined form of action). At the core of Hartman's work, measurable with his Profile, and likely the defining characteristic of authentic existence itself, is the movement from connecting with conceptual contemplation to connecting with executed action. That kind of existential connection becomes the portal to a next line of fundamental connections of engagement and motivation. "Good behavior strengthens certain networks."²⁸ (Now Brooks sounds like Hartman.) Or, said better, good behavior strengthens *the* "network"—which is life—or, said even better, strengthens "networking"—which is living.

We are able to talk Brook's game, even as it picks up on central issues in the work of Hartman. All that is said here about the "self-side," especially as supported by our studies on work-life balance at Yale, makes a great deal of sense. Finally, *who* we are has parity—at least in the context of this conversation—with *what* we do. However, when "push comes to shove" situations appear, how quickly the emphasis arrived at in our discussion seems to disappear. We are able to talk this talk, but not walk this walk. It is easy to have a connection or engagement that runs from brain to mouth but fails to find expression in our feet and hands.

For example, Leonard Wong, who served twenty years in the U. S. Army and taught leadership at West Point, wrote a highly influential and widely circulated piece for the Strategic Studies Institute (SSI) entitled, "Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom."²⁹ Much in Wong's article is accurate and probably helpful, albeit also fairly obvious—the sort of ideas people have been talking about in business for a very long time. His main point, rising from a seminal Army study in 2001 about future military leaders, is that military leaders of the future must be *adaptable*.³⁰ Of course, military leaders must be adaptable. This salient fact is true in regard to the future, but has it not always been true—again, fairly obvious.

Wong then spends nineteen pages demonstrating—accurately I am sure—how the complex experiences encountered during Operation Iraqi Freedom demonstrated the need for leadership agility, adaptability, and innovation. Then, he reasons, accurately again, that "crucible" experiences in which there is unpredictability and chaos can be created as training events to prepare future leaders for what they will encounter on real battlefields in the future. He believes that the outcome will be

²⁸ *Ibid.*

²⁹ Leonard Wong, "Developing Adaptive Leaders: The Crucible Experience of Operation Iraqi Freedom," The Institute for Strategic Studies, ISBN 1-58487-167-9, <http://www.carlisle.army.mil/ssi>.

³⁰ *Headquarter, Department of the Army, The Army Training and Leader Development Panel Officer Study Report to the Army*, <http://www.army.mil/atld>, 2001.

leaders who can deal with ambiguity more effectively and respond to situations of change more immediately. Have not leaders always been able to function in the ambiguous “fog of war” with the ability to deal with change expediently? Surely, training, and Wong’s cross-training, which he presents as if it were a new idea, have always been a part of military training strategies designed to encourage adaptability and agility. There is more to leadership than tactical agility. If not, then we remain solidly stuck on the work-side/*what* side in the all-important, but not only-important, arena of skill set *techne*.

However—*however*—what Wong seems to miss totally, and what usually is missed in discussions of leadership, is that the Army study about future leaders actually concluded that “future leaders needed to be *self-aware* and adaptable.”³¹ He totally and completely gives emphasis to the adaptable part of the equation, but never comes back to the self-aware dimension, except to say that enough chaos, unpredictability, and ambiguity will produce—as a kind of serendipitous side effect—self awareness. Again, we are at the place of Wong’s perception of the obvious being acute, and the old axiom that if something doesn’t kill us, it will “make” us in some way. The problem: Wong’s “enough said” is not enough said.

Even when he turns to the “crucible experience,” which he takes directly from leadership management icon, Warren Bennis,³² he misses the Bennis emphasis on how the crucible “teaches a person who he or she is.”³³ There is the assumption—the totally typical assumption—that some sort of automatic linkage causes self awareness to rise out of situations of ambiguity and complexity. This assumption keeps a parity of attention from being given to specific discussions, research, and exploration of the self-awareness end of the spectrum—the *arête* end. Compared to all of the simulated strategies that heighten leadership agility and adaptability, the self-awareness part is marginalized and made almost inconsequential. Probably because the self-awareness part is harder to encompass, it is functionally overlooked. Self awareness, at its highest levels, does not just happen by accident or by designs that hope and assume that it will happen as a secondary by-product of other activities. Brooks and Hartman can be brilliant, even acknowledged, and then left out. But then, Wong sees Operation Iraqi Freedom as some sort of triumphant paragon of military success, so his perspectives may be skewed from the inception.

³¹ Wong, 1.

³² Warren G. Bennis, *On Becoming a Leader*. New York: Basic Books, 2003. Warren G. Bennis and Robert J. Thomas, *Geeks and Geezers: How Era, Values, and Defining Moments Shape Leaders*. Boston: Harvard Business School Press, 2002.

³³ Wong, 2.

5. Recalling Clark Leonard Hull

Although Clark Hull is, at most, a very obscure figure in the history of modern psychology, by the mid-1940s, following the publication of his *Principles of Behavior*,³⁴ he was one of the best-known and most cited writers in the entire field of psychological investigation. He was also one of the first “scientific” psychologists who pursued the creation of assessment attribute testing, but he was continuously confounded by the vague inexactitude of validation processes. Hartman was clearly aware of Hull’s work, and in *The Structure of Value*³⁵ Hartman categorizes Hull’s work as the primary example of a systemic approach to psychology, as compared to the extrinsic approach of Behaviorism, and the intrinsic approach of Maslow and Humanistic Psychology. In retrospect, given Hartman’s formal axiology, perhaps they both intended to create mathematical and logical models. In spite of a mathematics that may have turned out to be more metaphorical for Hull—as it did for Hartman—than he anticipated, Hull made a major contribution to understanding the phenomenon of motivation.

Hull was born in New York in 1884 and had a very difficult upbringing. His parents eked out a meager farming existence, there was little precedent for formal education in his family, and he suffered from polio and a variety of other illnesses. He was strongly motivated to improve his existence, was always pretty good in school, and was willing to do any work available—and lots of it—to make his way. His first interests were in engineering and physics, which may have contributed to the systemic mathematical approach to psychology that dominated his work and made it unique in the field. He saw psychology as a natural science that would eventually be as metric and as empirically based as any of the other objective sciences. He tried various forms of religion but always found them wanting. He prided himself on having a great aunt who was hanged on Boston Common because of her radical religious convictions.³⁶ In all likelihood, his interest in psychology was partly driven by the lack of meaning and of adequate explanation for human behavior that he found in traditional religion. Hull taught at the University of Wisconsin, Yale University, and Harvard. He was close friends with Alfred North Whitehead.

³⁴ Clark Leonard Hull, *Principles of Behavior*. New York: C. Appleton-Century Co., Inc., 1943. Followed later by Clark Leonard Hull, *Essentials of Behavior*. New Haven: Yale University Press, 1951.

³⁵ Hartman, *The Structure of Value*, 307.

³⁶ Frank A. Beach, “Clark Leonard Hull,” *Biographical Memoirs*. Washington: The National Academy of Sciences, 1959. Based on C. L. Hull, *A History of Psychology in Autobiography*, edited by E. G. Boring, H. S. Langfeld, and R. M. Yerkes (1952), IV, 143-162.

Hull's engineering and physics background—the same scientific emphasis that influenced Hartman—led him to believe that the behavioral factors that were gaining the attention of modern psychology at the time could be translated into mathematics and mathematical formulas. Such a “mathematico-deduction,” as he called it, would allow for a much more discriminating way to look at the entire issue of stimulus-response, which he strongly advocated. He was greatly influenced by Pavlov's basic ideas about stimulus-response, and he thought that most human behavior is a response to the stimuli of the environment in which people live. However, and this is his key point, there are a wide variety of variables that exist between the initial stimulus and the corresponding response. The key to understanding and predicting behavior resides in assessing these variables. The power of these variables is primarily manifested in motivation, or what Hull called a person's “reaction potential,” the potential to respond/react to a particular situation. Some factors advance this potential/motivation, while others restrict or inhibit it.

So far, so good. Keep in mind that Hull was a product of his age, just like Hartman, and the tendency to apply the exciting findings of post-Einstein mathematics, science, logic, and physics to the “human sciences” was about as tantalizing as it could be at the time. Maybe both deeply believed it to be actually possible. Hull said: “Psychologists must not only develop a thorough understanding of mathematics, they must think in mathematics.”³⁷

He then produced the following formula:

$$sEr = (sHr \times D \times K \times V) - (sIr + Ir) \pm sOr.$$

Those who know the work of Hartman should recognize a kinship of this with the transfinite mathematics of *The Structure of Value*. Since I have fairly famously advanced Hartman's mathematical constructions as metaphors, I can also find value in what Hull is saying relating to motivation if I see his formulations more metaphorically. Perceived in this way, his insights into the factors motivating behavior create a fairly distinctive platform for conversation and awareness. Keep in mind the value that Hartman placed on being able to talk/discuss with distinctiveness, and Hull's strange construction will take on a value of its own. Here, then, are the constituent elements of his formulation:

sEr – This is the phenomenon that Hull is ultimately trying to understand more completely, the factor of motivation, the energy that empowers engagement, involvement, and action, maybe even something of the passion or commitment that a person brings to some endeavor. This is his “reaction potential” that stands in the midst of the movement from stimulus to response. Conceptually, not so much mathematically in an exacting way, Hull is on a pretty persuasive track at this point.

³⁷ D. P. Schultz and S. E. Schultz, *A History of Modern Psychology*. New York: Harcourt, Brace, Jovanovich, 1987, 241.

We do experience stimuli from our environments, often in the form of needs that we have (even *deprivations*, to use a word popular in his time) and the needs that are presented to us by others, including our organizations, that someone else believes we can or should be able to meet. We will, to one degree or another and depending on what other variables are a part of our stimulus-response moment/event, exhibit a potential to react/respond to these stimuli.

sHr – Hull accounts for habit as constituting a powerful force in our motivation and the way we react to various stimuli. Habit could be the skill sets we have learned from significant times of practice, such as the concert pianist who has played across a lifetime, or the body-mind/brain-muscle connections ingrained into the golfing mechanics of a great golfer (or the bad habits of a mediocre golfer). Habits could also be the unquestioned moral and cultural standards that are accepted by a person in ways not unlike Freud’s “superego.” Habits could simply be—though powerfully be—the sometimes sacrosanct ways of doing things that fall under the category of conventional wisdom, the status quo, or “the way things are done around here.” In some political or religious settings, habits can even be legislated. In whatever format habits occur, Hull is absolutely right about their power in motivation, engagement, involvement, and action. Habits are also potentially an axiological factor, as cultures and people do not often allow something to become habituated unless they believe it is important, vital, right, of worth, good, or moral.

D – On a simplistic level, this is “drive strength” or the power that certain drives have. Again, simplistically, the greater intensity or length of time there has been in regard to deprivation, the more *D*/drive strength there will be. This, of course, makes total sense if you were to talk about going without food, water, or air for any substantial length of time. Drive factors could be less obvious and much more subtle, for example, the length of time since a sales person has made a sale or the length of time since your college football team has won a national championship. Deprivation can be either real or conceptual, and it can come from the past as a lack or from the future as a desire (or some combination of the two).

K – I am not sure why Hull chose the letter “K,” except that the letter “I” is used elsewhere. The variable being charted here is “incentive.” This could be a bridge to axiology since “*incentive*” for Hull means “the *value* of the stimuli.” Some stimuli have higher value, e.g., being with my friend at a ball game, while others would have even greater value, e.g., being with my friend in a foxhole in battle or while my friend’s spouse is going through major surgery. It would be easy to layer on to the formula a hierarchy of values not unlike Hartman’s systemic, extrinsic, and intrinsic. None of this is out of line with most modern motivational theories. To motivate a child or a worker, you have to understand what incentives have value and what incentives do not, even though they might have value for you.

V – This factor is extremely interesting, especially in regard to the primary emphases of David Brooks’s work. For Hull, “V” is the “measure of connective-

ness”³⁸ that a person experiences or feels toward the stimuli and the desirability of the outcomes/responses. “V” most likely means “value”—how important something is to a person, how much difference it makes to a person, how much a person “takes something personally.” There is a great deal of “felt reality” or existential connection at this point. What Brooks is saying about “connection,” what Hull is saying, Hartman’s concept of an “intrinsic experience” or “intrinsic value experience,” and the German *Zwischenmenschliche* (“*between-ness*”) are basically different facets of the same stone. Any “incentive” (“K”) can be “connected to” in varying degrees; the connection can be strong or weak, much in the same way that concepts for Hartman can be rich or lean, so there is a direct correlation between the strength of the connection and the value placed on an incentive. The “K” is exponentially multiplied (x) by “V.”

Next, note the grouping (sHr x D x K x V). The multiplication signs convey that these factors are exponential in their mutually inclusive impact on each other. The greater the force of any single factor, the greater the resulting power of motivation or “reaction potential.”

The minus sign (-) which comes before the next construct means that just as positive factors in motivation, engagement, and reaction potential enhance each other, so negative factors detract and create obstacles.

sIr – Here, Hull is describing the “I”/Inhibiting factors involved with general negative reinforcers. What these actually are will vary depending on the unique circumstances and individuals involved. These realities run quite deeply within a person or situation. For example, the presence of too much adverse criticism can be inhibiting and negate Self-esteem and Self-confidence. Fear, threat, or some form of intimidation can have a similar impact. The lack of transparency and inferior communication that creates the kind of anxiety that arises from unknowns and uncertainties can have a similar inhibiting impact. The HVP is good at measuring the presence and intensity of these kinds of inhibiting factors.

In combination, (+) with the “sIr” gives the “Ir.” This compound also represents “I”/Inhibiting factors in addition to “sIr” inhibiting factors. The “Ir” factors are more immediate and not as ingrained into the stimulus-response equation. While the “sIr” may reach into more that is subtle, nuanced, and etched more deeply on the individual’s personal experience, the “rI” factors are more immediate to a situation, more “surface” than “depth.” For example, in the midst of meeting demands, working hard, and being appropriately motivated, a person may become fatigued and tired. Tiredness is a generally underappreciated phenomenon in the modern workplace and in people’s lives in general. Clarity of valuation and the judgment that drives decision making can be compromised by fatigue. “Battle fatigue” was an early term used for our more modern Post-traumatic Stress Disorder. Chronic

³⁸ R. Thomaon. *A Pelican History of Psychology*. New York: Penguin Books, 1968, 237-242.

Fatigue Syndrome is, as yet, not well understood, and it may eventually be seen as the accumulative ravaging of ideal life and coping.

Finally, Hull closes his formula with the compound “+/-sOr.” This is the structure for “random error,” although it is not clear if he is trying to compensate for random errors in the formula’s calculation. In a more complex manner, he may be trying to account for the fact of unplanned and unintentional consequences that can be both negatively error-filled or serendipitously helpful. There will always be factors in motivational response and reaction potential that do not appear even in the most disciplined preliminary consideration. The concluding part of the formula may simply be an open invitation to ask: “What have we not yet taken into consideration that may be important to factor into our awareness?” At times, this question will only be answered in retrospective debriefings on past events.

Hartman is probably right, to a certain extent, in categorizing Hull’s work as *systemic* conceptual psychology. Ironically, Hartman seemed to have trouble with Hull’s over-formularization and mathematics. Hartman stands Hull’s work over against the Humanistic Psychology—the *intrinsic* psychology—of Maslow. Yet, Hull speaks again and again about how so much behavior is ultimately needs driven. Hull’s discussion of biological needs sounds exactly like the first level of Maslow’s hierarchy. The traditional judgment on Hull’s work, that “His adherence to a mathematical and formal system of theory building is open to both criticism and praise,”³⁹ could just as easily apply to Hartman’s adherence to transfinite math in his own formal axiology. Yet, in both instances, if the mathematics can be seen as more metaphorical in its force, a powerful platform for conversation and heightened awareness is created. In this sense, the dissection of the phenomenon of motivation and engagement—reaction potential—through the lens created by Hull may be both compelling and insightful in the way that it contributes in a positive manner to the overall conversation.

6. Conclusion

On March 19, 2011, I timed my daily exercise run-walk to coincide with the rising of the full moon that evening. This particular full moon was special in the sense that as it rose its orbit was closer to the earth than at any time in eighteen years. This eighteen-year event was dubbed “The Super Moon,” and indeed it was. Scientists even calculated that the visual effect was 14% to 34% greater than any other full moon normally experienced. As I walked and stopped to stare along the east-facing brow of Signal Mountain and looked out over the City of Chattanooga with the Great Smokey Mountains in the background, the sight was moving in almost every way imaginable.

³⁹ Shultz and Shultz, 242.

The experience with the moon prompted contemplation. It occurred to me that eight super moons before—in the early-to-mid-1860s—soldiers in gray would have stood on this very brow and watched the movements of other soldiers—those in blue—across the valley below. For at least 7,000 years, American Indians of one tribe or another walked this same brow. I could not help but further consider that in eighteen more years, when this moon comes around in its normative cycle that has been going on for hundreds of thousands of years, I will be in my 80s, if I am lucky enough to still be alive. By the time the moon comes back in its nearness cycle, many changes will have occurred. Going forward or backward in time, thoughts become very daunting.

A week before the super moon, my run-walks took me into a large neighborhood about a half-mile from my home where a raging tornado had touched down. Roofs were off of houses, utility poles were strewn on the ground, sign posts were demolished, and huge trees were down in yard after yard. Yet, within a week, all of the power was back on and the cleanup process had begun. Brush, fallen limbs, and whole trees almost magically disappeared. Ground was repaired and new grass planted. New visitors coming into the neighborhood for the first time would have a hard time recognizing that any unusual event had taken place. I stopped along the way numerous times and counted rings on downed trees. There must have been fifty trees along one stretch of roadway that were older than I.

More contemplation, of course. Now, I am wondering if my existence will be of much more consequence than these trees. At the end of my physical existence as a human being, more than likely, a spot of ground will be disturbed, then repaired, and maybe planted over with grass seed. Were it not for the likely grave marker that will stand on that plot of ground as a somewhat timeless identifier, there would not be much more record of me than of those downed trees.

My thoughts may seem to be going off in an odd direction, or at least becoming a bit maudlin. Please stick with me a moment or two. My discussions of the moon and its cycles, the trees and their age rings, create what might be called a “Tolstoy view of history.”⁴⁰ For Tolstoy—remember those days and weeks that it took to read *War and Peace*—life takes place in the broadest cosmic brush strokes. A Tolstoy view would see history and life as a gigantic weather front moving across a major section of the entire planet. We human beings, in our personal existence, are not much more than leaves being rustled about along the way by the front’s winds as they blow.

We hate Tolstoy’s view of history. It is almost abhorrent to our very existence as human beings, at least in the way we *like* to see ourselves. For, if Tolstoy is right,

⁴⁰ See Louis Menand, “Wild Thing: Did the OSS Help Win the War against Hitler?” *The New Yorker Magazine*, (March 14, 2011), 69ff. Menand’s highly interesting article stirred the concept of the difference between a Tolstoy view of history and a Hollywood view of history. His general intent in the article was not directly related to the content of this overall discussion.

we are veritably insignificant, and what we do will not amount to much or be of any lasting value. We are modern people, raised on Hollywood movies and television, and the impact of these profound media expressions has determined exactly how we will see ourselves. The Hollywood movie will not work, so focus groups designed to increase ticket sales say, unless it is less than 120 minutes. People's attention spans will not last any longer. So, movie makers must introduce characters, define heroes and villains, develop and carry out a plot, aim for a denouement that allows pieces to begin to fall into place at approximately the 100 minute point, and then drive home a conclusion that wraps all loose ends into a neat bundle of satisfying completion. It is all very sexual, and the focus groups love the sexual. We are tantalized and attracted, especially by libidinous bare skin and violence. According to the all-knowing focus groups, movies must draw us into an engagement, both emotional and physical, then produce an almost orgasmic high point of agitated resolution, then drift off with a gratifying afterglow that moves us to tell others how great the movie was that they must now attend.

Yet, it all works, and it is solidly "here and now." What some individual actor does in a moment of real existential choice can change the course of history. How easily we become convinced that we can be Luke Skywalker, or Davy Crockett at the Alamo. We buy Luke t-shirts, expensive and ill-made, and wear them for the world to see as if they were our own identities or personalities. We bend the real history of Crockett and the Alamo because Daddy Walt Disney knows that will be better for us. Tennessee's own Senator Estes Kefauver took Crockett's coonskin frontier cap and made it his campaign symbol when he ran for President in the 1950s; maybe people would be convinced that he could do for the country what Crockett did for freedom in Texas. He tried to tap into the mythic ideal—or awesome truth—that a singular individual can make a great deal of difference. But, people liked John Kennedy better. He looked more like the movie stars, and he was a real hero who fought the enemy from the deck of a PT Boat in World War II. Kennedy, the individual, did matter. The way he captured the country's imagination became a catalyst for change. He told us that life was a matter of what we could do for our country, but we also learned later that anti-heros like Lee Harvey Oswald, James Earl Ray, Sirhan Sirhan, or Mark David Chapman were capable of singular events that could also change the whole world and all of history.

The number one best-selling book on *The New York Times* best sellers list at the time of this writing is political analyst Jeff Greenfield's *Then Everything Changed*.⁴¹ Greenfield creates a "what-if" document based on his considerable personal involvement in late Twentieth Century American politics. In each scenario, just one small different twist in time, decision-making, or activity could easily—very

⁴¹ Jeff Greenfield, *Then Everything Changed: Stunning, Alternative Histories of American Politics, JFK, RFK, Carter, Ford, and Reagan*. New York: G. P. Putnam's Sons, 2011.

easily—have changed the entire fabric of recent American political history and, by implication, the history of the world. Projecting through the lens of Greenfield, Tolstoy is exactly wrong: singular individuals in critical moments of choice can make differences that matter inexorably. Television heightens this entire process in our minds even more than the movies: news becomes sound bites and programming must serve up stories that are complete in twenty-one minutes because a thirty minute programming segment requires nine minutes for advertising.

So, who is correct, Tolstoy or Hollywood? Obviously, both are correct in their own ways. There is the singular moment of difference-making choice, but there is the abiding likelihood that some great library like Alexandria in ancient Egypt could be burned, or some Y2K computer crash could actually occur, and large quantities of historical facts could be lost forever. Some person of gigantic influence might conclude that history is bunk, or a whole generation could decide that anything over thirty years old is inconsequential. We live in the midst of the singular now, of course, so that seems to make all the difference, but we do not even have a clue about what is taking place in the singularity of the houses of the neighborhoods we are looking out on right now, much less the entire world, even much less history as it stretches out from days, to generations, to eons of time. How could what we do in our singular moment in time matter? But, in another way, what we do in our singular moments of time is *all* that matters.

We circle back, finally, to the issue of motivation, or *engagement*, or *connection*, or *involvement*—motivation's outcomes. We are left with a conclusion, and how we see this conclusion will have a profound impact on the degree to which we are likely to be motivated, engaged, connected, and involved. The conclusion: Life is—without question—incidental, but it is also heavily consequential—even in the midst of those mere “incidents” that we call our existence as human beings. Believing that life is heavily consequential, we have the opportunity—if we are *motivated*—to enter into the complexities of real life, to gain high levels of gratification from dealing with those complexities, and—especially if we have some degree of self-determining autonomy—to shape those incidents that frame existence in a consequential manner.

Abraham Lincoln stood up at Gettysburg and read from a very short speech that he had scribbled on the back of an envelope. He was acting as President on this day, doing his duty, dedicating a national cemetery for victims who had fallen in a great battle of the Civil War. Lincoln was not an arrogant man and, in fact, was quite sick that day. Playing down his own role and exalting that of the heroic soldiers who had fallen on that field of battle, Lincoln spoke with clarity: “The world will little note nor long remember what we say here.” Of course, Lincoln was exactly wrong. That small speech became one of the greatest orations of all time, and his singular life—cut short by an assassin's bullet—has been dramatically consequential for generations. Nothing was incidental about Lincoln or his “Gettysburg Address.”

This discussion of a “unified field theory” that brings together critical variables in motivation must stop for now. There will always be more to be said, but perhaps

this discussion can focus the path that other discussions will take. At the core of the field, like the pulsating energy center of an atom, is a highly systemic value statement that axiomatically provides a defining nexus for the rest of the field and its mutually inclusive and reinforcing elements. The defining statement was clearly influenced by genetics, culture, family, and education. Beyond these very real influences, it is the result of evaluative judgments (values and valuations) and real choices that are initially manifested in a *belief* that what is done in life matters, has value, and is consequential in the sense that what is done in life makes a difference. This belief is held conceptually and can even be held with a substantial amount of emotional fervor. On higher motivational level, this belief is held both conceptually and in real actions that take place in real settings. This point is much like that made by St. Anselm and affirmed in Hartman's "theologic,"⁴² that existence in mind alone, merely conceptual existence is not as *great* as existence in mind and in reality, especially as executed in actions. The Hartman Value Profile can give substantial insight into whether a person or group of people are primarily motivated/engaged conceptually, and if motivation/engagement will move into real actions.

In our "unified field theory," and following the paradigm of the atom, around the core is focused a surrounding shell that provides further definition. Part of that surrounding shell is *Systemic judgment*, part is *Extrinsic judgment*, and part is *Intrinsic judgment*. "Judgment" is the outward manifestation of core values, core beliefs, and core evaluations driven in systemic, extrinsic, and/or intrinsic ways. It is better for the three areas to have balance, as opposed to specialization, so that they can reinforce and complement each other. If, for one person, one area far outweighs other area(s), it will be important to develop the area(s) of weakness, meanwhile augmenting with mentors or other individuals who can help compensate for the area(s) of weakness. The HVP can distinctively show how the balance and integration of the core-surrounding shell is distributed. Using it discloses how the core values, beliefs, and evaluative judgments are manifested in motivation strategically (S), tactically (E), and in terms of the human elements involved (I).

Finally, orbiting around the essential core and its surrounding shell will be a multitude of variants that contribute to the entire field of motivation in its more personally unique manifestations. All of these orbiting influences may be in play, or they may not all be in play. Some people will have fewer of these influencing factors, and others will have more. Their number and intensity will also likely change from time to time. Defining, understanding, and being aware of these factors is an important part of self-knowledge. If organizational leaders have an awareness of these factors and how they impact people within the organization, they can better

⁴² C. Stephen Byrum, *The Value Structure of Theology*. Boston: Tapestry Press, 1991. Also see C. Stephen Byrum, "The Theological Implications of the Axiological Formulations of Robert S. Hartman," in Rem B. Edwards and John W. Davis (eds), *Forms of Value and Valuation: Theory and Application*. Washington: University Press of America, 1991, 403ff.

understanding how best to motivate them. When individual self awareness and organizational awareness find meeting places of clarity, personal and organizational synergy will be increased dramatically. A platform of discussion in which variable factors of influence on motivation are taken into consideration will help make the entire phenomenon of motivation more dynamic and more easily grasped.

My list of orbiting variable factors in motivation does not attempt to be complete, arbitrary, or exhaustive. I am consciously trying to avoid only the issue of gaining pleasure and avoiding pain as motivating factors. Such a “hedonistic” philosophy discussion would be possible and pertinent in other settings, but it not part of my intent at this point. Clearly, when these variable factors come into play in a positive manner, pleasure is likely to be experienced. When they do not come into play, or do so in negative ways, pain is a likely outcome. But that is not the focus I take in this discussion. The basic nature of “unified field theories” is to be very relativistic and never complete. There is an “infinite universe” or, to use Hartman’s mathematical metaphor, a non-denumerable infinity of possibilities when variable factors relating to motivation are involved. However, something of the following probably fits and plays a highly significant role in the overall field:

Challenge—the opportunity to deal with situations that require “stretching” in terms of meeting demands. This is opposed to “boring” or “same ‘ole, same ‘ole” responsibilities that stimulate no positive expenditure of energy.

Complexity—sophisticated people actually like complex situations and gain satisfaction and gratification from solving complex puzzles. There may even be times when complexity manifested itself as desperation and necessity of the sort that, rightly engaged, can become the proverbial “mother of invention.”

Autonomy—to be self-determining in terms of making judgments that are your own is critical. People desire their own judgments, opinions, and perspectives. They want some degree of mastery of their own destinies by being personally included in the decision-making process. The central issue of my book, *From the Neck Up* (Boston: Tapestry Press, 2008), in which I contrast the management concepts of Frederick W. Turner, known as “scientific management,” and the management concepts of Robert Hartman, is that Turner did not want people to have to make judgments. Because of this, his people—almost as automatons—do not get engaged at a very high level and do not have much motivation that arises from within themselves. For Hartman, the key to getting people involved on a high level of engagement is to allow and ask them to make judgments and to put them in situations where judgments are required. There is likely a direct relationship between being asked to *evaluate* and finding *value* in what you do. Then, the higher the *value* found, the greater the motivation and engagement.

Recognition—the HVP makes it abundantly clear that positive recognition and compliments, as opposed to criticism, are profoundly powerful motivators. Recognition does not have to be grandiose; a pat on the back, congratulations, and “thank you” may have a power and dignity untold in their implications.

Reward—the positive recognition that the world is filled with economic realities that must be addressed. Ancient manuscripts said that “a laborer is worthy of his hire.” That is, we should be fairly and justly compensated for the investment of our life’s energies and the successes that we bring to organizations. For Hartman, profit sharing was more important than any economic principle; it was also a *human* principle that had to be honored alongside of other human responsibilities.

Excitement—realities that “stir our juices,” command our attention, and are aggressively entered into with anticipation and even some degree of joy.

Agitation—with both positive and negative causal impacts, something that stimulates us, makes us think, gives us occasions to react, drives us into circumstances of choice. We may not go looking for them, but some forms of agitation are unavoidable. Agitation may be a prelude to our “finest hour.” Consider Churchill’s speeches during the World War II “Battle of Britain.” Also, listen sometime to the Jimmy Buffet song, “It’s My Job,” in which there is dignity even in cleaning up messes. Agitation can also be manifested as *angst*, *ennui*, *Weltschmerz* (world-weariness) and despair.

Development/Growth—people love to find opportunities to grow. Giving people opportunities to grow, develop, learn new things, and have new experiences is one of the most powerful motivators available to organizations.

Respect for the Personal—while the “personal” may be defined in many different ways, to be involved with people or organizations that respect realities such as family, mates, children, and needs for rest, relaxation, and “time away” builds loyalty, a major catalyst for positive motivation. Rest/relaxation/restoration is vitally important because rest allows us to be ready and to be alert to factors of motivation present in our lives. Rest gives response energy that allows us to initially experience and then respond to motivating stimuli.

Respectability—working for an individual or an organization that you respect, in the finest sense of that word, breeds high levels of motivation. We have, of course, also seen the opposite; motivation is undercut and shuts down when our employers act in ways that diminish and defeat respect.

Collegiality—being a loyal part of a loyal team of people is a highly significant stimulus for motivation, especially in pressing and difficult situations. Soldiers⁴³ in battle will tell you that they fought for ideals, flag, and country to a certain extent, but what they really fought for was the person beside them in the trenches. Collegiality that elevates to solidarity and trust fires levels of motivation that people sometimes would not even expect of themselves.

When the “atomic” field of motivation really is firing with high energy, and all of the various factors are aligning with each other, we experience something of the kind of *connection* that David Brooks described. There is *connection* with people, with our own Self, with the world that we are part of, and with the work we do.

⁴³ See my *A War Still Raging: One Man’s Life to Vietnam and Beyond*. Chattanooga: Milton Publishing, 1988.

Within the experience of *connection*, we can talk about being at our “best”—an axiological, value word—and achieving our “best.” The ultimate *connection* is with the values at the essential core that drive us—the belief that what we do matters and makes a difference, the goodness that we find in what we do and who we are with, and the value that in some existential holistic way the entire world surrounding us takes on, even if only in incidental moments. We know, if we are lucky, that the incidental moments give worth to the larger whole of our own present time and may even etch some imprint on the future. Our *connections* raise the possibility that our basic potentials will be fulfilled. Somehow, we are drawn toward the conclusion that this kind of *connectedness* is—above all—*good*. Perhaps Hartman would say that we will have fulfilled the concept of that which we are capable of being. Somehow we know, because of Hartman’s insights, that this experience of *concept fulfillment*, *goodness*, is the most powerful form of motivation and the highest level of involved engagement that can exist. Moments of such *concept fulfillment* or *goodness*, give life and Self the highest intensity of motivation and engagement resulting in the highest sense of meaning and worth.

THE AXIOLOGICAL PROCESS FOR MAKING GOOD STUDENTS IN A UNIVERSITY CONTEXT

Gilberto Carrasco Hernández

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Gilberto studied Philosophy at UNAM and earned the Masters Degree in Orientation and Human Development at the Iberoamerican University. His doctoral dissertation, *Axiology, A Proposal to Facilitate the Enrichment of the System of Values of the Personality*, was in development between 1999 and 2001, and he is now writing the final version.

In 2001, Gilberto published his book, *The Axiological Theory of Human Development*. During the last 11 years, he has applied the ideas in his book and in *Axiology* to diverse institutions in the System of Technological Universities, especially the Technological University Emiliano Zapata of the State of Morelos, MX. You can e-mail him at: gcarrascoh@prodigy.net.mx.

Abstract

This paper presents the experience we had in teaching a course on Formal Axiology and Human Development, which aimed to build a “good student,” to the 746 freshmen wanting careers in Information Technology, Industrial Maintenance, Design and Industrial Production, Industrial Processes, Mechatronics, Administration and Business Development at Emiliano Zapata Technological University of the State of Morelos. I will discuss the course design, training teachers to replicate the course to all freshmen, and the results of the course.

1. Background for Teaching Values to Facilitate Human Development

Teaching Values, as we know, has its roots in Plato’s Academy, the first school of a university character known in the western world. It was founded by Socrates’s disciple for the purpose of teaching young Athenians to be virtuous. Plato had a particular interest in preparing rulers and teaching them the political virtue of justice.

Another important humanist who also saw in axiological education a way to promote human development was Viktor Frankl. After having suffered the atrocities of the concentration camps, he thought he could prevent the world from having the collective neurosis that led to Nazi totalitarianism. Frankl thought logo-therapist

education would have a direct impact on consciousness, “the organ of meaning” (Frankl, 1995, 22). He said that logotherapy teachings would produce a refined conscience (Frankl, 1994, 106) and enable people to distinguish between “what is or is not important, what is fundamental or not, in short, what makes sense and what does not” (107).

Because value issues have to do with the Good and, in turn, with human behavior, value problems constitute the core of ethical and anthropological thought. Circumstances between nineteen forty and the early sixties produced much important research on axiological issues, not only in Mexico, but worldwide. Perhaps such deep interest was strongly motivated by wounds left by the atrocities of World War II, such as the concentration camps and the annihilation of hundreds of thousands of people in Hiroshima and Nagasaki by spectacular and terribly destructive nuclear technology. The threat of destroying all human life motivated the greatest humanists to investigate issues of value and the meaning of human life.

Thus, in Mexico, under the leadership of the National Autonomous University of Mexico (UNAM), an intense academic environment was created that promoted philosophical and humanistic research in response to the threat of military destruction. At the UNAM in the 1950s, full-time researchers like Samuel Ramos and Eduardo García Máynez were investigating humanist philosophy, and Antonio Gómez Robledo was working on axiological issues relating to justice.

In 1951, Dr. Erich Fromm came to the Faculty of Medicine in the UNAM. He taught several seminars on humanistic psychoanalysis and founded both the Mexican Psychoanalytic Society and the Mexican Institute of Psychoanalysis. Many students were trained by this distinguished researcher in our highest institution of learning, such as Dr. Ramon de la Fuente and Dr. Mario Cardenas Trigos.

One of the most important contributions to humanist thought by Erich Fromm was his insistence that people need a system of values. It is inevitable that human beings have a framework of guidance, either to justify destruction and power, or to justify love (Fromm, 1956, 43). Martin Villanueva recognized that the need for this framework is more acute after adolescence. Because of their value systems, any human being can potentially become an architect of concentration camps and mass exterminations, like the diabolical Eichmann; or he or she can become a saint like Mother Teresa of Calcutta, who won the Nobel Peace Prize and spent most of her life serving the poor and dying. These two diametrically opposed examples are of people whose value systems were completely different: the value system of Eichmann was based on the ideals of Nazism, where human life was serving the Führer for power, destruction, and death. The value system of Mother Teresa of Calcutta was based on Jesus’s moral and spiritual ideals. These examples actually show that “the human mind does what it knows” (Hartman, 1970, 103). From this we can see the importance of axiological education for affecting the conduct of persons, whether for evil or for good.

This renowned humanistic environment at UNAM attracted the attention of Robert S. Hartman, and in 1955 Dr. Hartman came to this university, invited by

Doctors Samuel Ramos and Eduardo Garcia Máynez. Here he worked as a researcher at the Institute for Philosophical Research, which was an academic platform for developing his masterpiece, *The Structure of Value*, which was originally published in Spanish by the Fondo de Cultura Economica in 1957.

2. Teaching Formal Axiology in Mexico

The Institute for Philosophical Research of the UNAM offered humanities researchers the suitable environment that Dr. Hartman described in the section on “Acknowledgments” at the front of *The Structure of Value*. It was a research center at “which this University offers virtually ideal conditions for full-time researchers,” with “an atmosphere of scholarly dedication which is a privilege to share” (English version, xvii).

This environment enabled Dr. Hartman to disseminate his work through classes, seminars, and conferences at other universities in addition to the UNAM, such as Yale University, the Massachusetts Institute of Technology (MIT), and the University of Tennessee. Distinguished philosophers and humanists from Europe, the USA, and Mexico became interested in his axiological work. In these institutions Hartmanian Formal Axiology, taught by its creator, inspired the pioneering development of undergraduate theses, master’s and doctoral degrees, and articles and books.

Hartman’s impetus to spread Formal Axiology involved other colleagues such as Abraham Maslow, Viktor Frankl, and Erich From. In 1957, all of them tried to create an impressive Centre for Advanced Studies in Human Values (Hartman, Maslow, 1970, 106) at MIT, which unfortunately did not continue.

However, the individual work of Dr. Hartman produced much fruit. For example, as a result of a Seminar on Formal Axiology and Humanistic Psychoanalysis, conducted between 1959 and 1961 at UNAM, Hartman and Dr. Mario Cardenas Trigos, psychoanalyst and disciple of Erich Fromm, created the Hartman-Cardenas Value Inventory (HVP). First published in *The Modern Manual* in 1968, it was one of the first technological applications of high-impact of formal axiology. The HVP is currently translated into several languages and has been the basis for developing several investigations—parallel forms of HPV that measure specific aspects of personality, various clinical and statistical validations of that inventory, organizational models of management based on the HVP, and many books and articles that explain and apply formal axiology in many ways. These were developed by colleagues and disciples of Dr. Hartman such as David and Vera Mefford, Rem B. Edwards, Robert Kinsell Smith, Mark A. Moore, Leon Pomeroy, Gary Acquaviva, Israel Stolar, and Ricardo Ortiz, among others.

2.1. The Teacher's School, "Normal Quince de Mayo," in 1980

The first recorded teaching of Formal Axiology in Mexico in an educational environment occurred in 1980. It was conducted one of the Mexican disciples closest to Dr. Hartman, Professor Alfonso Lozano González, in a Teacher's School, "Normal Quince de Mayo," in Mexico City. His applied Axio-education project (Lozano Gonzalez, 1981) had two basic objectives: teaching the basics of formal axiology in a humanist environment to students and teachers of the school, and promoting the harmonious development of their personalities. Professor Lozano brought together a select group of people who taught and enrolled in natural science subjects, pedagogy, philosophy, mathematics, music, literature, and physical education. He lectured on formal axiology and psycho-axiology, and he provided guidance to students and teachers based on their results on the HVP. I actively participated in this project, teaching science and the computer processing of the HVP. Teachers of other subjects taught humanist ideas structured by formal axiology to students beginning their teaching careers.

The project lasted for two years. Its impact on several students was quite profound. For example, I remember "L," a girl of 19, who was quite disorganized and untidy early in the course. She was married to a man who continually devalued and abused her. She had been raped at age twelve by her teacher in the sixth grade. Between September 1980 and September 1981, we saw "L" gradually improve. She found a job to support and sustain herself and her small daughter. Toward the end of the course, "L" attended daily with a plastic flower adorning her dress and a smile on her face. She no longer tolerated her husband's humiliation and abuse, and her self-esteem had improved significantly.

During the course of the "Normal Quince de Mayo" project, I observed in practice for the first time what Dr. Cardenas Trigos said: that knowledge of science leads to action. I appreciated also what Dr. Hartman said: that knowledge of Formal Axiology, "the science of the knowledge of good and evil," can help people to "open their eyes" make good decisions, act correctly, and walk towards its realization. Inspired by the "Normal Quince de Mayo" project, I worked thereafter with great enthusiasm to enrich my humanistic education so I could teach formal axiology to young people more effectively. I studied Philosophy formally in the School of Philosophy at UNAM. I completed a Master in Counseling and Human Development at the Universidad Iberoamericana and then fulfilled all requirements for a Doctorate in Human Development at the same university.

3. Human Development Technology

Technology is the practical application of theoretical knowledge. In the natural sciences, e.g., physics, the theoretical formulation of Newton's second law, " $F = ma$ " is the foundation of technological applications like mechanical engineering,

aeronautical engineering, naval engineering, and civil engineering, which have made possible the massive construction of automobiles, trucks, aircraft, ships, and buildings.

Similarly, on the theoretical side, between 1982 and 1989, I expanded the Axiological Theory of Human Development (Carrasco Hernandez, 1999, 63-130), beginning with the application of the logical ordering of Formal Axiology to the field of human development psychology. I obtained deductively an axiological meaning for such important concepts as person, personality, self, personality structure, harmonious development of personality, education, the infinite potential of the human person, the process of human development, and the meaning of life. To accomplish this, I had to develop the ideas of “ordinal good”(41-49), which allow us to explain the functionality of the value system of the personality, the Hartman Value Profile (HVP), and the process of human development, among other things.

The technological application of the Axiological Theory of Human Development is obtained through experientially teaching the theory, which seeks to facilitate human development towards the objectives stated by Maslow: self-realization, and the construction of good men (and women). This is what the teacher, Jesús Díaz Ibáñez, called “technology of human development” (Jesús Díaz, 1988, 217).

Between 1989 and 1999, I wrote my Research Master’s Thesis, *Values and Human Development: Applying Formal Axiology to Facilitate the Harmonious Development of Personality* (Carrasco Hernández, 1999). There I reported on controlled measurements of the value system of students before and after courses of formal axiology and human development that I taught to both adolescents and adults, especially in the Centro Escolar Maestro Mexicano in Mexico City. Statistically and at the individual level the results were impressive; in some cases dramatic changes in the value systems of the students were measured. I discussed these statistical results with Dr. Mario Cardenas and with my friend, Israel Stolar, who suggested how to check the results using individual interviews with students and their parents in order to verify experientially the changes that were first observed statistically. I selected those with the most surprising results and interviewed these students and their parents. I verified the very surprising positive changes documented in the aforementioned thesis.

So, for the past 21 years, I have observed in practice that teaching Formal Axiology through the Axiological Theory of Human Development is an effective tool for facilitating the harmonious development of personality. At this time, I and others have taught 16 to 24 hour courses on Formal Axiology and Human Development in different educational institutions, with the firm goal of affecting directly the axiological consciousness of youth. We used the setting, concepts, and various experiential exercises based on existential humanist psychology, person centered focusing, self-discovery exercises, logotherapy, gestalt therapy, music therapy, and meditation, to look for the direct existential immediate applicability of such knowledge in people’s lives. The general syllabus of our course was as follows:

- a. Philosophy of Science. Structure of the natural sciences and the humanities.
- b. Formal axiology.
- c. Axiological theory of human development.
- d. Experiential exercises.

We observed with satisfaction that an axiological theory of human development offered to adolescents and adults as a valid intellectual framework for their existence can be very useful to those who want it. When they decide to implement this theory, they can apply it at their own pace and in their own style and begin to move toward their own best functioning and to take actions that fill their lives with meaning, harmony, and a more valuable existence.

From our effective and formally documented results (Carrasco Hernandez, 1999, 74-116) we conclude that teaching the Axiological Theory of Human Development is a valid technological application of Formal Axiology.

4. The Axiological Process of Making Good Students in a University Context

We have even more good evidence that the experiential teaching of Formal Axiology and the Axiological Theory of Human Development helps people to develop more completely and harmoniously. Between 2002 and 2008, I applied these ideas at the Technological University Emiliano Zapata in the Information Technology center, where I was Director. The strategy followed had these objectives: to facilitate the maximum development of teachers and students in three concepts that were defined axiologically: self-realization, organizational quality, and high competitiveness (Carrasco Hernandez, 2001). All this was supported unconditionally by the University's President, Dr. Alejandro Pacheco Gómez and the Academic Secretary of the institution, Ms. Beatriz Ramírez Velázquez.

During this period, the qualitative results were excellent at both organizational and individual levels (*Informes Anuales* 2005, 2006, 2007, 2008, *Presentación*). The quality of our center was accredited by the Interagency Committee on Higher Education Assessment (CIEES) and the National Council for Accreditation in Computer Science (CONAIC). Students' academic results were raised, as assessed by the General Exam Exit given by the National Evaluation Center (CENEVAL) at the end of their college careers. An Information Technology center we are creating with an investment of 50 million pesos has a Software Development Center, an Advanced Training Center Network, a Center for Process Automation, a Contact Center, and an Institute for Entrepreneurs. Four academic bodies are being organized to articulate these projects within the academic divisions to generate applied research by faculty, students, and alumni.

In 2009, this project of the IT's Center played a decisive role in UTEZ to obtain the State Prize for Quality and the SEP-ANUT Prize awarded by the National Association of Technological Universities for the best qualitative innovations in our

technological universities. There are 73 technological universities in México (*Informe Anuale 2009*, Presentación).

At the individual level, teachers and students have received scholarships for technological specialization and postgraduate courses of study in recognized institutions of México and France. Every day more alumni get good jobs. Today this center is positioned as a leader in its field.

Here was its distinctive feature: at first I was the only professor in Formal Axiology and Human Development in the UTEZ. However, in 2010 we received a different challenge: all freshmen in the Centers of Information Technology, Industrial Maintenance, Design and Industrial Production, Management and Business Development, were required to participate in an introductory course in which they would get a foundation for high quality advancement within the university. There was a need to train more teachers in this subject.

4.1 Design and Structure of the Introductory Course

First, a team was appointed to define precisely the objectives and agenda of the introductory course. It was headed by the Academic Secretary of the UTEZ, Beatriz Ramirez Velázquez M.A. Other members were Dr. Jesus Coria Juarez, Ms. Gastonia Moreno, Ms. Aisle Sanchez, Psych, Alicia Roman, and me.

Dr. Jesus Coria recommended these academic guidelines for designing the introductory course:

1. Analyze the results of a review of the college to measure the strengths and weaknesses of students. From this we would get the basis for designing the course.
2. Provide students with a humanistic, collaborative, and high technology environment to attract students to the university.
3. Select the course's teachers having an appropriate profile.
4. Train all teachers, so that all groups are taught the same subjects, using the same teaching techniques.
5. Provide teacher training materials.
6. Provide all students with an anthology which will allow them to study at home.
7. At the end of the course, ask students to form teams to create an experiential representation of their experience throughout the course; this could be a play, a video, a mural, or a song.
8. Assess the students' perceptions about teachers, college, and the introductory course in order to implement continuous improvement actions.

With these policies, we organized the modules and the topics to be taught in the course of 60 hours as follows:

Modules:	Duration:	Organized by:
Mathematics with meaning.	16 hours	Aisle Sánchez, M.A.
Academic Skills	8 hours	Dr. Jesús Coria Juarez
Orthography (Writing Skills)	12 hours	Ms. Gastonia Moreno
Addiction prevention and psycho-axiological evaluations.	4 hours	Psic. Alicia Román
Introduction to careers in college.	6 hours	Directors of Academic's Divisions.
Human Development (based on Formal Axiology)	14 hours	Gilberto Carrasco, M.A.

Each Organizer was responsible for preparing teaching materials and training teachers to impart the modules. Ms. Gastonia Moreno made a herculean effort to select the teachers who participated, articulate the schedule, and control the logistics of the course. It involved 746 freshmen organized into 21 groups. Fifty professors, participated, 17 of whom were instructors in the Human Development module based on Formal Axiology.

4.2 Designing the Content of the Human Development Module

I proposed this objective for this module: students should be made aware of the actions they can take to bring their student career in the UTEZ to a high quality end. To do this, students had to identify the areas in which they are already well developed and the areas that need development, so that from the first day of classes at UTEZ they can seek maximum performance directed toward high academic quality.

To meet these objectives, I used Formal Axiology to define first, the “good student” concept, elaborated in this way: in the intrinsic dimension, the human dimension, a good student respects all persons, including herself or himself; in the extrinsic dimension, the material dimension, a good student has a high professional image, is responsible, completes work and production projects, and takes care of his or her body and sexuality. And in the systemic dimension, the intellectual, a good student meets class schedules, intellectually strives for the highest competencies, and seeks international certifications for various competencies.

To make the teaching of Formal Axiology significant, I designed music therapy exercises. These consist of listening to popular songs known by young people who already understand the words and music, then ask students to identify their axiological levels of meaning. For example, military marches were used to identify positive valuations starting with the systemic values; for extrinsic values, erotic music was used, such as “Hips Don’t Lie” by Shakira; for intrinsic value items we used “Till There Was You” by The Beatles, or the “Ode to Joy” by Beethoven. To

identify undervaluation, we use music with lyrics about drunks and indifference, such as “Pass Me the Bottle” by Match and Daddy, or Satanic music.

Later we asked students to evaluate themselves with respect to the three axiological dimensions of the concept “good student” in order to identify open areas of opportunity and then develop a work program based on this having significant opportunities for self-realization and organizational quality.

This is the agenda of the Human Development course:

DAY	HOURS	TOPICS	CONTENT	ACTIVITIES
1	1	Concept of “ideal student” or “good student.”	Identify what students think about the concept of good and evil.	Brainstorming.
1	1	Basis of Formal Axiology.	Logical definition of Good, classes of goods.	Theoretical exposure.
2	2	Basis of Formal Axiology. Axiological structure of the concept of “ideal student.”	Hierarchy of classes of good, the language of classes of good. Axiological dimensions of the concept of “good student”: Intrinsic dimension (human), extrinsic dimension (material) and systemic dimension (intellectual).	Examples of music-therapy. Theoretical exposition
3	2	Direction of Human Development.	Axiological structure of personality and self-realization concept. Quality Concept.	Theoretical exposition and Phillips 6.6.*
4	2	The Meaning of Life.	The meaning of life in college, work, love, and suffering.	Exhibition theoretical, Exercise: “epitaph”
5	1	Self-evaluation.	Self-assessment of students to the concept of “ideal student.”	Phillips 6.6.
5	1	Action Plan.	Actions that students can implement to facilitate maximum personal and professional development at UTEZ, in the material, intellectual, and spiritual dimensions.	Phillips 6.6.
5	2	Preparation of artistic representation.	Preparation of Sociodrama, composition, infomercial, song, mime, or topshow.	Preparedness activities according to the type of presentation.
5	2	Presentation of artistic representation.	Presentation of Sociodrama composition, infomercial, song, mime or topshow.	Submission of representation.
	Total	14		

* Phillips 6.6 is a dynamic group or educational technique developed by J. Donald Phillips. Its function is to motivate an orderly discussion between participants and allow an exchange of views.

In our course, we also reviewed the axiological bases of Quality ISO 9000, Maslow's self-realization. And Viktor Frankl's ideas about the meaning of life in love, work, and suffering. In this way, we added high quality meaning to their lives as college students in the three Hartmanian value dimensions: moral/spiritual, physical/material, and intellectual/cognitive.

To identify significant learning, at the end of this module, students were asked to carry out an experiential learning project through any artistic expression like a song, a play, music, mime, a mural or a video.

4.3 Teacher Training

To teach the Human Development module, besides me, we selected 16 teachers who have moral sensitivity in dealing with youth. Thus, 2 engineers were invited, 8 who graduated in teaching and humanities, 2 psychologists, 1 marketing person, 2 administrators, and 1 sociologist. At the beginning, only 2 teachers had any notions of Formal Axiology. The other teachers did not know this theory. However, through their teaching experiences, humanistic ideas were not foreign to them.

In a 4 hour course, I gave them the basics of formal axiology, i.e., the definitions of good, good class, hierarchy, and the language of good classes. To illustrate the identification of classes of good, we used music therapy exercises. Later I explained to them the concept of good student, in the three axiological dimensions, and I showed how that opens the way to invite students to self-assess in three axiological dimensions with respect to the concept of good student.

Then I explained to them etiologically the concept of quality, the process of human development, self-realization, and the meaning of life, in order to promote in students ideas about the harmonious development of the three axiological dimensions, i.e., intellectual, material, and moral/spiritual.

I provided on a CD didactic material consisting of a PowerPoint presentation with all items sorted by each session, an anthology with the basics of Formal Axiology and the Axiological Theory of Human Development in pdf format, the book, *Man's for Search Meaning*, by Viktor Frankl in pdf format, and examples of music in mp3 format.

Most teachers were pleasantly surprised to understand Formal Axiology with clarity, simplicity, and effectiveness as a way to address the issues of self-realization, the meaning of life, and quality and labor competency. They showed no rejection of these ideas; on the contrary, they were so excited by the logic provided by Formal Axiology to address human development. I suggested that they circulate among their students the anthology on the foundations of Formal Axiology and Viktor Frankl's book to read at home.

I invited them to impose their personal style in exposing Formal Axiology to their classes in order to enrich their own teaching, to create other didactic examples, and fill with high quality this concept of "good teacher:" in the intrinsic dimension

to treat students with respect, empathy, and congruence; in the extrinsic dimension, to care for their professional image and to direct their personal development projects; and in the systemic dimension, to be ready on time for classes and to fulfill 100% of their agendas.

5. Results of the Human Development Module for Students

Of the 21 groups organized for the course of human development, I participated as an instructor in two groups. On the penultimate day, I saw something unusual: I arrived one minute late to class because my office had a problem to solve. Upon entering the room, I saw the entire group of students asking me, first, about my tardiness, second, why they had not yet applied for 2 days in advance to begin preparation for their play, as other groups were already doing. They also wanted to express their great experience in the course through an artistic representation. I felt in them a deep motivation and a strong commitment that I had never before seen in any group. Spontaneously, they organized themselves and began to prepare a “reality show” on issues of responsible management of sexuality.

At the end of the course, I went to 4 other performing arts groups where I was not the instructor, and I saw the joy, enthusiasm, commitment, and understanding of positive values that the students wanted to express, as both a professional commitment, and as appreciation of the university and its professors. Even in a theatrical performance that satirized a teacher, we noted, they finely expressed an experiential understanding of intrinsic values.

After the introductory course, the groups had to separate in order to comply with the schedules of their various careers. These young people did not like to be separated; they had met and had bonded. In the students of this generation, there is great motivation and high commitment.

In the September-December quarter of this year, I am teaching “Social-cultural Formation I” to three groups from two different centers. This course addresses issues of sustainable development and human development. I note that this is the best generation of students since this university began 10 years ago. These students arrive on time for class, strive to make assignments, participate in classes, prepare for the examinations, and are working as a team.

As I am a coordinator of the Academy of Human Development and Training University of UTEZ, teachers often come to me to mention interesting student’s initiatives to improve environmental management in our university. Students wish to participate in reforestation programs, waste separation, composting, etc. I see in this generation of students a better axiological awareness that allows them to be interested in the ecological and human problems of our time.

I think the concept of “excellent student” is already installed significantly in the minds of the youth of this generation.

5.1 Evaluating the Results of the Human Development Module

To achieve the ongoing improvement of our course, we needed objective measures. Dr. Jesus Coria applied a survey with a Likert scale to ascertain the opinion of 746 students in the course. Although only 584 students responded, we obtained reliable measures of student perception. Specifically, the Human Development course showed these results:

ASPECT:	VERY GOOD %	GOOD %	REGULAR %	BAD %	VERY BAD %	NOT DEFINED %
The teacher attended all classes.	86.64	10.79	1.37	0.51	0.17	0.51
The teacher is known for being punctual at the beginning and end of class.	77.74	19.01	2.05	0.51	0.00	0.51
The thematic content showed organization and order.	75.17	21.23	2.74	0.00	0.00	0.86
Explain how the teacher gave me a clear idea of knowledge.	74.14	21.58	3.42	0.34	0.00	0.51
The teacher addressed the issues by setting examples that allowed me to learn.	77.57	19.18	2.91	0.17	0.00	0.17
Learning activities caught my attention and stimulated my interest in the class.	73.45	22.09	3.60	0.68	0.00	0.17
The teacher remained determined to maintain good communication.	84.83	13.36	1.20	0.17	0.00	0.34
The support I received from the teacher allowed me to learn for myself.	76.54	21.58	1.71	0.00	0.00	0.17
At the end of the course I got a comprehensive understanding of subject knowledge.	73.97	22.09	3.60	0.17	0.00	0.17
The faculty is distinguished in being respectful.	90.58	8.39	0.34	0.00	0.00	0.51
The teacher allowed me to express my ideas and encouraged diversity of opinions in his or her group.	84.59	14.21	0.68	0.00	0.00	0.51
General Average	79.57	17.59	2.14	0.23	0.01	0.40

These statistics show that 96.06% of the students managed to get a very good or good comprehensive understanding of the thematic knowledge of Formal Axiology as applied to Human Development. Also the teachers helped to develop a very good or good interest in and attention to their topics in 95.54% of the students.

With the results from their evaluation by students, we measured the individual qualification of teachers. Surprisingly, we found that 4 of the teachers with the highest qualifications did better than I. Three of them knew no Formal Axiology.

Overall, the results of the evaluations of teachers were: 7 teachers scored between 8 and 9.49 points (on a scale of 0 to 10, where 6 is the minimum passing grade); 5 teachers scored between 7 and 8; 4 teachers were between 6 and 7 points. Only 2 teachers did not pass the assessment, i.e., scored between 4.9 and 5.9 points.

To verify the results of these assessments of improved attitudes and commitments of freshmen, I asked the open and honest professional opinion of the teachers who were instructors in the Human Development module. How did they view the usefulness and applicability of Formal Axiology in facilitating human growth, as

observed in the responses of the students in their groups? I asked them via e-mail to report their findings so we could continue to improve our courses. Overall, these were their views:

- Psych. Alicia Román: “Young people are shocked when told they must choose a system of values in order to fill their lives with meaning. The issue of values raised by Formal Axiology had greater acceptance with young people than when approached from other perspectives. We are able to offer them a tool that will enable them to create greater awareness and thus to make better decisions, to know what is healthy and abnormal, good and evil, from reflection and not from taxing experiences. I would like more training in this subject to be better able to share more with young people.”

- Mr. Carlos Rojas: “I think the course successfully completed as planned encouraged student awareness of the healthy and pathological, and of moral commitment that involves making a difference between right and wrong. It is noteworthy that teachers need to take another course to further enrich their own knowledge in Formal Axiology, so we can better support our students when they need it.”

- Ms. Cruz Madero Serna: “I am convinced of the valuable contribution of axiologically defining the meaning of life and the importance of self-fulfillment for UTEZ’s students; I believe that the reflections, dynamic exercises, and activities that took place during sessions worked as didactic tools to instill values.”

- Ms. Enna Rubit Perez: “In general, I found this to be a special course because I personally saw beyond my own expectations as a teacher. It gives me a feeling of fullness to know that we are working with the training of human beings before anything else. It makes you think of BEING, which is essential before anything.”

- Ms. Mariana Benitez: “I think the course in Human Development is helpful because it encourages students to think about themselves and think what they want from their lives. The reaction I saw in the participants was very positive and proactive. They were motivated by the fact that they engaged in activities that could feed back to their persons and to their way of thinking or perceiving things. It allows students to ‘humanize’ more and understand the concepts of things. I believe that applying Formal Axiology is helpful because it offers a simple understanding of the concept of good, of what is expected of them as UTEZ’s students, and of how they can improve their self-concepts. I believe the course helps students gain a more positive perception of things and allows them to understand that they must find a balance between intellectual, human, and material values.”

- Ms. Mariana Martínez Silva: “For the guys who took the course, I used the material provided to us, plus a presentation and a series of tests to give me an idea of the simplest profiles of students. From the perspective of the youth, I saw that they do not care who develops theories or conducts research; their hunger goes beyond that. They want to be guided, supported in orientation, to make good decisions. They thought that determining the truth is the hardest part. I bowed my head to the discovery of something very important called ‘Balance.’”

- Ms. Mary Cruz Aguilar: "It is important to note that young people who entered this year showed more interest. In the Human Development course, the students discover the potentials they have, and that soon after, the daily stress goes away. I believe that regaining some of their qualities of life generates an energy that causes them to continue to grow and become better people. The interaction with students sensitized me and makes me grow personally and professionally. I also pledge to be better every day."

- Mr. Miguel Angel Ramirez: "Learning activities in the Human Development course harmonized perfectly with the subject of thinking skills because students have different strategies for learning how to learn, which facilitated the work in class. Regarding the topics, although there are situations that transcend the work of teaching (family problems, economic, etc.), the students developed their awareness by discovering that their human and professional development is unlimited, that alternatives for developing a healthy personality are endless, and that as human beings we have moral and social commitments and obligations to fulfill. Axiology will give them greater individual and collective consciousness to differentiate good from bad, healthy from pathological. Best of all, perhaps, is their improved ability to make decisions, to learn how to make decisions. Lastly, I think it would be very important for faculty in the Academic Center for Human Development to do further research on and/or to take a course about it. This will help them to provide better service and attention to young people."

- Ms. Sandra Luz Delgado: "The issues addressed and the way in which they were raised in my opinion were much more significant, considering that the activities were more experiential and personal for our students. There was active participation by students through reflection, analysis, and resolution of dilemmas, where the three axiological dimensions were involved and they had to make their own estimates and assess particular situations. They clarify their own values according to their needs and life's plan. It gives real incentives to stay in school, work hard, and make sacrifices when students enthusiastically discuss and study the issues covered and are allowed to give their opinions based on their own meditation and reflection on how they resolve conflicts of values. They understand the environment in which they are unfolding and their need to reaffirm and strengthen their values. The workshop approach allows youth to get involved, and many of them make attitude changes and in turn promote positive values. The educational material we were given on the CD personally helped me a lot and still helps me, because I apply it in different academic contexts."

- Mr. Victor Manuel Juarez Landa: "From Formal Axiology, we analyzed cultural relativism and the impact of neoliberalism in identifying 'being good' from the standpoint of materialism or economics. I asked students what is right and wrong from their own personal perspective. They said it is the importance of values and their definitions, and comparing "the brain's operating system" whereby a person weighs and decides actions within a frame of reference or personal paradigm that builds a human being throughout life. Hence, there was a transfer to Robert S.

Hartman who identified something shared by all things that are good: “They fulfill their concept.” Either be constructive or destructive, that is, be a good priest or a good murderer; or examples of material things: a good chair or a good table. Robert S. Hartman’s concept of a person is based on the principle of developing human potentials to their maximum level. This was illustrated by and discussed in relation to the American film “The Pursuit of Happiness” (Will Smith) where a seller wants to be a broker of the stock market. Further support came from the class of models of excellent literature by authors like S. Covey and his books, *The Seven Habits of Highly Effective People* and *The Eighth Habit*; also from the author Anthony Robbins in his book, *Power Without Limits*.

- Ms. Nancy Rodriguez: “What I gained from the Human Development course is reflection on and re-learning of the topics discussed. They are usually concepts and/or acts with which we are familiar and practice most of the time, but without stopping a moment in the execution of consciousness. I believe that the material provided for the development of topics for the course is helpful to clarify and provide new insights into our professional and personal lives, including interior and exterior potentials. I think if we continue to study and explore this humanistic area, we would have a sense of life with greater meaning.”

6. Conclusions

I think this is the first time that Mexico has promoted teaching Formal Axiology applied to Human Development, and it is successfully impacting a whole generation of university students. Previously, there were isolated efforts, but this time, the educational project was more ambitious. We started by training in the short time of two weeks a select group of teachers from all disciplines who then spread axiological ideas simultaneously to freshmen throughout the university.

This generation of 746 youths who started in September 2010 at seven of UTEZ’s centers showed more academic commitment and motivation than students of previous generations. The ideas of “good,” “a good student,” and “a good teacher” are already circulating throughout the institution. We will have to make other projects and follow-up studies to explore the talents of students and, in turn, to corroborate the results.

There were two critical success factors in this project: First, the strong interest and commitment of senior management of UTEZ, especially President Alejandro Pacheco Gómez and Academic Secretary Beatriz Ramirez Velázquez, to support all activities aimed at improving the lives of young people. The goal of high quality lives led the team to work for the development of a complete introduction course.

Secondly, I consider that training teachers in the experiential use of Formal Axiology applied to Human Development, and the availability of didactic materials, aroused their interest and enthusiasm for spreading these ideas. They also found this to be useful in their personal lives and in other work scenarios or situations.

Undoubtedly, we made some mistakes. We will try to improve, however, based on the encouraging results obtained from both teachers and students. This is further evidence that there is a technological possibility to make Maslow's dream come true, in our case, to build "high quality students."

Thus, in Mexico and Morelos, there is an acute crisis of values unleashed by the cruel violence of drug cartels and the irrational destruction of nature that caused severe flooding this year in Nuevo León, Veracruz, and Tabasco. This is the response of the UTEZ: The comprehension of goodness, together with joint efforts from all of the university, to create an awareness in young students that promotes the sustainable development of this planet.

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**BABSON'S BOULDERS:
A HEURISTIC EXPLORATION OF THE DIMENSIONS OF VALUE**

Leon Pomeroy

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Abstract

I present this heuristic pilot study as a student of values. I offer it as a teacher to myself and to encourage others to join this project's search for a more intuitive and commonsense approach to Hartman's I, E, S dimensions of value, which he believed holds great descriptive, explanatory, and predictive powers concerning human behaviour. Unfolding in the pages of my *The New Science of Axiological Psychology* (Rodopi Press, 2005) is extensive evidence supporting this philosopher's hypothesis. Now I introduce "Babson's Boulders" in an effort to explore the "axiological signatures" of twenty-four values chiselled into granite boulders during the Great Depression of 1929. Roger Babson predicted that depression, and he survived with his wealth intact and without losing his moral compass, when many on Wall Street were losing their shirts. This pilot study examines the relationship between the Hartman's I, E, S "axes or lenses" of valuation and Babson's self-proclaimed core values in an effort to deepen our everyday understanding of axiological science.

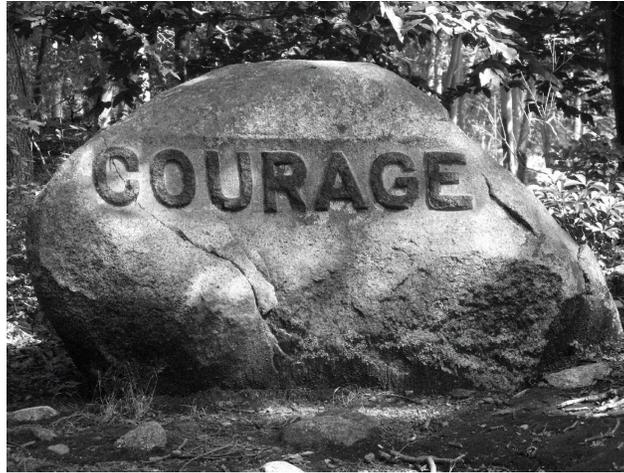
Introduction

Once upon a time a wealthy businessman by the name of Roger Babson (1875-1967) reflected on what had made him successful. He had survived the Great Depression of 1929 with all his wealth, and more so. Indeed, his econometric forecasting had predicted the Great Depression. Emerging from that tumultuous period he paused to reflect on the personal human values that had served him well. He settled on the following twenty-four values: *courage, ideas, help-mother, kindness, loyalty, if work stops, values decay, be on time, get a job, industry, integrity, keep out of debt, save, spiritual power, study, truth, work, be clean, be true, prosperity follows service, use your head, ideals, intelligence, never try never win, and initiative.*

Roger Babson is remembered for his many accomplishments that included the founding of Babson College in Massachusetts and Webber International University in Florida. He was an eleventh generation Babson from Gloucester, Massachusetts, and he graduated from Massachusetts Institute of Technology (MIT). Thereafter he sought to do something about the dismal science of economics and to succeed on Wall Street, where he worked for several prominent investment firms. By 1904 he established the “Babson Statistical Organization” specializing in the analysis of stock trends and the publication of business reports.

Throughout his life he held a strong interest in science and devoted much of his professional life to the scientific study of what Robert Malthus called “the dismal sciences of economics.” Babson and Hartman held similar views about the evolution of alchemy and astrology into natural sciences like chemistry and astronomy. Babson regarded the discipline of economics as pre-scientific in nature and more a natural philosophy than a natural science. As an M.I.T. graduate on Wall Street, he sought to do something about this and succeeded in introducing mathematics and statistics into economics and finance. In so doing, he revolutionized the business of economic and financial forecasting. He ended up writing many books, newsletters, newspaper columns, and magazine articles about economics; and he financed and published some eight editions of the *Business Barometers*, and ten editions of *Business Barometers for Profits, Security, and Income*.

In recognition of his achievements, he was invited to serve on the boards of many corporations listed on the New York Stock Exchange. He correctly predicted the September 5, 1929 stock market crash that shook the world and destroyed many lives. In later years he sought to identify the values that had contributed to his success and happiness, in hopes of guiding and inspiring others. He then retained the services of a Norwegian stone mason who carved his twenty-four self-selected values on large Granite Boulders at Dogtown, near Gloucester, MA. These boulders were left as a debris field by a receding glacier some 10,000 years ago.



One of Roger Babson's Twenty-Four Boulders at Dogtown

Together with Dr. Bill Knaus, a friend of some fifty years, during the fall of 2010, we visited Dogtown, walked the trails, and identified and photographed Babson's twenty-four boulders. Bill and I were members of that first "gang-of-four" clinical interns to complete training under the supervision of Albert Ellis. We both continue to be Fellows of the Albert Ellis Institute on Manhattan's Upper East Side. I'm also pleased to report this 2010 Pilot Study of Babson's Boulders just happened to take place on the one hundredth anniversary of the birth of philosopher Robert S. Hartman, and of my mother, Rachel Harlow Pomeroy.

Bill and I tracked the Granite Boulders down by walking the trails of Dogtown under overcast skies, while fending off mosquitoes, and now and then finding ourselves lost in the forest that now conceals the glacial debris field as well as Babson's Boulders. Barely before the sun had set I located the last of the twenty-four Granite Boulders. Appropriately enough, I was especially impressed by the "truth" and "spirituality" boulders.

1. Background

The region of the boulders is called "Dogtown" because many widows of deceased seamen and revolutionary war soldiers spent the remainder of their impoverished lives there. It was barren unfertile land no one wanted. It was unfit for farming. As the widows died off, their abandoned dogs ran wild, disturbing many in the region. In the course of time it all became the stuff of legend, including many a story of ghosts, hauntings, and dogs howling in the night.

As Bill and I walked among Babson's Boulders, bearing dramatic inscriptions of his cherished human values, I contemplated the meaning of it all from the perspective of the axiological science to which I've contributed in many ways for well over a quarter-century, as personal resources and time allowed. I took off my

clinical, theoretical, and empirical hats, and dawned my intuitive hat, the one that seizes upon heuristic and intuitive opportunities to grasp the deeper meaning of such concepts as “feeler value-vision,” “doer value-vision,” and “thinker value-vision,” which are modes of cognitive processing dedicated to valuation as opposed to the image capture of descriptive cognitive processing. These terms also respectively correspond to Hartman’s Intrinsic (I), Extrinsic (E), and Systemic (S) categories of value-vision. Here I invoke the “optical metaphor” that has served humankind well since the days of the Ancient Greeks, who rightly analogized “values” with “vision.”

What came immediately to my mind as I walked the labyrinthine trails of Dogtown, was data I had published that thoroughly established the validity of the explanatory, descriptive, and predictive powers of Hartman’s three categories of valuation and values, and therefore also the derivative beliefs and thought styles at the center of Ellisonian cognitive psychology. Between photographing and videotaping Granite Boulders, dodging smaller rocks capable of turning ankles, and waving off mosquitoes, I began to think of Hartman’s I, E, S as “elements” and of Babson’s values as “compounds” in a manner analogous to how we understand the compound “table salt” to consist of sodium (Na) and chloride (Cl). Chemistry and the periodic table help us understand the relative contribution of each element to the compound “table salt.”

Not in possession of an axiological laboratory, much less an axiological periodic table, I decided to draw on what knowledge I had and invite others to do the same. I invited six experts in the field of axiological science to sit on a panel of judges tasked with estimating the relative contributions of I, E, S to each of Babson’s values taken individually, and all twenty-four of them taken collectively. In time, four accepted and participated in this heuristic experiment, which I refer to as a “pilot study” or “preliminary study” that might lead me and others to more elegant considerations of axiological science and its implications and potential applications. I have also secured a panel of novice judges, consisting of informed university students, and because of current space limitations I intend to summarize their results in a future issue of this journal.

I asked this panel of esteemed judges merely to estimate as best they could the level of I, E, S contributions to each of Babson’s values taken individually as well as collectively. I expected them to draw upon their own expertise and to go beyond it—even into the realm of intuition and speculation, all of which I regarded to be “grist for the mill” of this pilot study. I hoped this approach might inspire a deeper and more probing examination of our assumptions as axiological scientists exploring the frontier of the axiological architecture of the mind-brain system that so defines human nature. More immediately, I hoped this approach might reveal what we might call the “axiological signature” of Babson’s values taken individually and collectively as a catalyst for further exploration of axiological content (e.g., ethics) and axiological mechanisms (e.g., I, E, S). The task before the judges was to assign or allocate the relative contributions of I, E, S, given as percent, to each of Babson’s self-selected, core values.

I hope this novel test and application of axiological science might serve to encourage those involved with its development to think more deeply about our assumptions and hopefully to inspire others to join us. Many of us have devoted much of our professional lives to the advancement of this new science, standing on the head and shoulders of philosopher Robert S. Hartman and his work and theoretical contributions. As a result we now have a paradigm shift in the social sciences of the sort the ancients merely dreamed about and moderns struggled with until Hartman achieved an operational definition of the meaning of “good” that had escaped the greatest minds down through the pages of history. With his breakthrough he gave me the theory of value, called “formal axiology,” that was nowhere to be found in my chosen profession. Some in my profession, like Abraham Maslow, speculated that the concept of value might be “obsolete,” while another, Milton Rokeach, vigorously defended his belief that the concept of “value” is the most important concept in all of psychology and the social sciences, even though it was the least studied and understood.

Finally, I decided that this exploratory “pilot study” would add presence and substance to the more exacting compilation of research findings summarized in the pages of my *New Science of Axiological Psychology*. I comforted myself knowing that many in my profession have chosen the path of pilot studies in their own pursuit of deeper considerations and conversations about the phenomenology of human behaviour and the mind-brain system behind it. As an Axiological Ambassador of the Hartman Institute, I was determined to carry out this study in hopes it might contribute ways of seizing the popular imagination and reaching the wider world.

2. The Pilot Study

How my panel of four expert judges went about executing the task given them was something they would decide for themselves. I wanted to know whether or how experts in the field might agree or disagree in the approaches they chose. It didn't matter if they agreed or not, it only mattered how experts, familiar with axiological science, represented and then solved the problem.

I easily imagined that some might approach it the same way they approached The Hartman Value Profile (HVP), by standing in *their own shoes*. I also imagined some might chose to stand in *Babson's shoes* when it came to assigning I, E, S percentages to Babson's values, or stand in the abstract *shoes of the collective called society*. It didn't matter. What mattered was how experts tackled the problem. I looked forward to their informed and intuitive estimates of I%, E%, and S% contributions to the values chiselled onto twenty-four Granite Boulders at Dogtown. I was determined not to allow striving for more elegant methodologies or approaches to become the enemy of the more informed pilot study I had in mind, and I'm indebted to the enthusiasm with which four judges (J1, J2, J3, J4) accepted the challenge. They were good sports. They were all I could ask for. I will reveal their names in the following “Discussion and Correspondence” section of this paper.

I also shared with the panel of judges my desire to discuss these findings at the 2011 meeting of the Robert S. Hartman Institute, and I viewed the project as partial fulfilment of my role as the Institute's Ambassador of Axiological Science. I also mentioned to them that the widely circulating *Psychology Today* magazine had invited me to contribute a Blog and that I hoped this project might also help me find ways of fulfilling that role, which has the potential of reaching the wider world with what we've accomplished in over a quarter century of thought, research, clinical, and entrepreneurial applications.

Finally, I sought to make the task before the judges more concrete by offering the following example involving "courage." In this example I offer the proportions ("axiological signature") of 60% I, 30% E, and 10% S, consistent with my notion of Babson's values as *axiological content* at the level of an "axiological compound," as distinguished from *axiological mechanisms* at the level of I, E, S "elements." "Courage" is one of the human values Babson chiselled into an impressive Granite boulder at Dogtown.

Values	I	E	S
Courage	60%	30%	10%

Results

My discussion of results is presented in *Tables/Figures 1-20* and in selected correspondence with individual judges, whom I identify as J1, J2, J3, and J4. *Table 1* to follow summarizes the best estimates of our four judges concerning the relative weights, allocations, or contributions of I, E, S to the twenty-four human values Babson cherished enough to chisel into twenty-four large Granite Boulders.

Each data point, each number, is given as a %, as is done above. These data show that the approaches of judges J1 and J3 are similar and constitute one cluster, while the relative similarities of the approaches of judges J2 and J4 constitute a discretely different cluster. These findings, reflected in *Table 1* data, are graphically depicted under the heading of "axiological space" in *Figure 20*.

As we will see, over the course of contemplating data summarized in all the tables, the approach of J4 is novel and idiosyncratic and only partially supported by the other member of his cluster, J2. In several cases J4 assigns 0% and 100% contributions of I, E, S sensitivity to Babson's values. In the "Discussion and Correspondence" section of this paper I present some of the communications between J4 and myself in which J4 argues the rationale for his approach, as distinguished from the other three judges, especially J1 and J3.

Tables 2-4 explore present data quantifying the level of *inter-judge agreements*, measured by correlating their I%, E% and S% allocations or assignments to each of Babson's twenty-four core values taken collectively, not individually. This collapses the twenty-four values into a single set to look at the overall level of the Intrinsic (I), Extrinsic (E), and Systemic (S) in the human values that Babson felt defined him

and his successes. This is achieved by making all possible pair-wise comparisons of the four judges, taking all of Babson's values into consideration: J-1 vs. J-2; J1 vs. J3; J1 vs. J4; J2 vs. J3; J2 vs. J4; and J3 vs. J4. The statistic employed is the "Pearson Product Moment Correlation." where statistical significance is given as $p < .05$. Note that the level of significance found in *Tables 2-4* can exceed $p < .000$.

Clearly, our judges perceived the Intrinsic (I) in Babson's values in a similar way when considered collectively. The inter-judge agreement begins to weaken slightly for the Extrinsic (E) and is weakest when it comes to Systemic (S) inter-judge agreement. Tables 5, 6, and 7 reveal this trend in terms of mean I%, E%, and S% loadings on Babson's values considered collectively. Table 8 summarizes these data for easy comparison. Consider J1 who assigned 38.7% I, 20.3% E, and 13.4% S to Babson's values considered collectively. Later we consider if this wholistic "axiological signature" of I (38.7), E (30.3), and S (13.4) can be taken to be the I, E, S profile of the man (Babson) himself, as given by J1. Ditto for J2, J3, and J4. This is the question: To what degree can we know the man, Roger Babson, from our estimates of the relative presence of I%, E%, and S% in his twenty-four values taken as a whole. Tables 9a, 10a, and 11a summarize data reflecting how all four judges viewed each of the twenty-four values considered individually.

The pattern for *Intrinsic* and *Extrinsic Agreements* among the four judges (*Tables 2 and 3*) shows convergence when the twenty-four values are taken as a whole.

Intrinsic Agreement: We now take a closer look at the convergence of Intrinsic (I) agreement among our judges. Referring to Table 2, probabilities in the range of $p < .000$ to $p = .002$ record the level of inter-judge agreement when it comes to assigning Intrinsic (I) weight to Babson's values as a whole. (This pattern is repeated in *Table 3* which records the convergence of assignment when attributing levels of Extrinsic (E) sensitivity to Babson's values, again taken collectively.) The inter-correlations, indexing the level of inter-judge agreement, range from $r = + 0.526$ to $r = + 0.802$, with associated probabilities of $p = .008$ and $p < .000$ respectively. This high level of statistical significance suggests that chance had nothing to do with these agreements. It is very meaningful that the correlations are positive rather than negative. We may conclude that these are both statistically significant and meaningful findings of inter-judge agreement concerning the detection of global Intrinsic (I) sensitivity when considering Babson's core values collectively.

Extrinsic Agreement: From *Table 3* we have data confirming how the judges tended to agree when assigning levels of Extrinsic (E) sensitivity to Babson's values taken collectively as a whole. The strength of these inter-judge agreements is given by correlations that range from $r = + 0.722$ to $r = + 0.539$, with associated probabilities of $p < .000$ and $p = .007$ respectively. Once again, they are positive, significant, and meaningful correlations, establishing a pattern of inter-judge agreement in this dimension of value-vision.

Systemic Agreement: Inspecting *Table 4* reveals a dramatic departure from the pattern of inter-judge agreements concerning Babson's overall Intrinsic (I) and Extrinsic (E) sensitivities as reflected in his choice of existentially meaningful, twenty-four core values. The correlations drop off and fall into the range of $r = +0.522$ to $r = +0.165$, with associated probabilities of $p = .009$ and $p = .441$ respectively. The $p = .441$ is not statistically significant. In the assignment of overall Systemic (S) sensitivity to Babson's values, considered collectively, the judges part company with each other in very individual ways. *Table 20*, depicting "axiological space" defined by other measures to be discussed, reveals common ground between J1 and J3, which forms one cluster of two judges. J2 and J4 also tend to approach the task of assigning I, E, S weights in a manner that distinguishes them from J1 and J3. The common ground between J2 and J4 breaks down when assigning Systemic (S) weight to Babson's values considered globally, bundled, or taken collectively. In *Table 4* we see that J4's systemic approach is not significantly related to J2's systemic approach. The correlation or $r = +0.251$ is not significant at $p = 0.236$. Instead, J4's systemic approach to Babson's values taken collectively more nearly resembles that of J1 ($r = +0.484$, $p = 0.017$, which is statistically significant). J3's systemic approach falls between at $r = +0.435$, $p = .033$). In assessing Babson's overall systemic value-vision, J4 parts company with J2 and sides with J1. This invites a close reading of the discussion I later record with J1 and J4.

The axiological common ground between J1 and J3 begins to show up in the Intrinsic (I) and Extrinsic (E) dimensions (*Tables 2, 3*) yielding correlations of $r = +0.527$ ($p = .008$); and $r = +0.539$ ($p = .007$) respectively. This pattern is broken when they assign Systemic (S) weight to Babson's core values taken collectively ($r = +0.165$ ($p = .441$, ns)). Here J1 breaks ranks with J3 and sides more with J2 ($r = +0.522$ ($p = .009$)). J1's global Systemic (S) assessment of all Babson's values is much closer to J2 than J3 or J4. Thus, the allocation of Systemic (S) weight or sensitivity to Babson's values taken together (globally) by our judges produces disagreements, or breaks the relative harmony that existed when assigning levels of Intrinsic (I) and Extrinsic (E) sensitivity to all of Babson's core values considered together. Attributing Systemic (S) sensitivity to Babson's collection of values we see a breakdown in inter-judge agreement reflected in their assignment of Intrinsic (I) and Extrinsic (E) sensitivities to the values in question. Data summarized in subsequent tables will amplify on this breakdown of agreement. This loss of agreement around the Systemic (S) impacts the Intrinsic (I) and Systemic (S) dimensions in different ways, for in all cases assigning I%, E%, and S% must add up to 100% by definition. The bar graphs of *Tables 16, 17, 18, and 19* help us visualize the axiological alliances between J1 and J3 on the one hand and J2 and J4 on the other.

Data summarized in *Tables 2-4* show that J1 and J3 correlate very significantly ($p = .008$, $p = .007$) when seeing the Intrinsic (I) and Extrinsic (E) in Babson values; but they don't agree at all when seeing the Systemic (S) ($p = .441$, ns) in Babson's values. In J2 and J4 we see high levels of agreement for the Intrinsic (I) and

Extrinsic (E) ($p = .002$ and $p = .005$). When seeing the Systemic, our judges form different alliances: J1 finds partners in J4 and J2. J4 finds partners in J1 and J3. J1 is also a “bridge” between these alliances, given J1’s relation with J4 ($p = .017$) about assigning a Systemic (S) weight to all of Babson’s values.

From data summarized in *Tables 5, 6, and 7*, we may compute the average variability (Std. Dev.) in our judges assignment of dimensional loading to Babson’s values considered collectively. It is 16.7 for J1, 30.7 for J2, 19.3 for J3, and 33.9 for J4. These measures alone suggest a pairing of J1 and J3 (16.7 vs. 19.3) and a pairing of J2 and J4 (30.7 vs. 33.9) when it comes to executing the task given them. J2 (J4’s “axiological partner?”) exhibits the highest degree of variability (Std. Dev. of 32.15 and 37.14) when assigning Intrinsic (I) and Extrinsic (E) dimensional weights, and his partner J4 exhibits the highest variability when it comes to assigning Systemic (S) dimensional weights to Babson core values taken as a whole. This tendency of J2 and J4 to “vote” together is seen in their highest variability scores for the Systemic (S) given in *Table 7*, where J4’s variability is seen approaching 40.0, the highest variability measure recorded in this study. This means J4 sees wide ranging contributions of Systemic (S) sensitivity in Babson’s core human values—far more than the other judges. You will find in my “Discussion and Correspondence” section J4’s rationale for his approach to the task posed by this Pilot Study.

In their assignment of Systemic (S) sensitivity to Babson’s values as a whole, our judges express approaches that differ from their handling of the Intrinsic (I) and Extrinsic (E) dimensions of value. These findings are confirmed by data summarized in *Tables 5-8*. Here the mean for each judge reflects the average level of I, E, S seen in all of Babson’s values taken as a whole or collectively. Statistically speaking, this is a calculation of the average level of Intrinsic (I), Extrinsic (E), and Systemic (S) sensitivity seen in all twenty-four Babson values. *Table 5* reveals how J1 and J3 assigned higher levels of intrinsic sensitivity (38.71; 38.96 respectively) than J2 and J4 (24.79; 17.08 respectively). These data begin to identify J1 and J3 as taking a similar approach. Likewise, J2 and J4 are most alike when it comes to assigning Intrinsic (I) sensitivity to all of Babson’s values taken collectively.

The measure of variability, the “standard deviation,” (Std. Dev.) measures just how much a judge’s estimate of I, E, and S for each of Babson’s values varies across all twenty-four values in question. *Tables 5, 6, 7, 8* all record Std. Dev. for estimated I, E, S involvement with each of Babson’s twenty-four values. It reflects the range of dimensional weights assigned to each of Babson’s twenty-four values taken collectively. These measures of variability refer to just how much each judge varies in his assignment of I, E, S weights to all of Babson’s values. Perhaps in our “Discussion and Correspondence” section we will find clues to the origins of this variability. Clearly, a more standardized approach to the task of this Pilot Study would reduce the variability and expand inter-judge agreement. Can we expect that in the future axiological science will give us this standardization and greater precision? Do we need to take a closer look at our mathematical model and theory to get there? At present the level of subjectivity involved in a task of this sort tends

to foster such variability. The one “force” coercing the present level of inter-judge agreement and uniformity seems to be the back-loading of biosocial and sociocultural influences shared by all of us. The comparatively low Std. Dev. scores in the present study point to a more uniform or even allocation of I, E, S sensitivities across all twenty-four Babson values in which the extremes of 0% or 100% are avoided. Given the premise of a constant co-play and counter-play among the I, E, S dimensions of value-vision, it stands to reason that extremes of 0% and 100% I, E, S allocations would be avoided. J1’s dimensional weighing seems to reflect this premise. J1 is consistently steady and even handed in assigning I, E, S weights to Babson’s core values. J4 is more consistently variable and not opposed to assigning 0% and 100% dimensional weights to Babson’s values (See *Table 1*). From *Table 7* we see that the range of Systemic (S) weights is 0% to 100% for J4 and 0% to 80% for his axiological partner, J2. J2 and J4 are more nearly alike when it comes to seeing an average role for the Systemic (S) when considering all twenty-four values. This pattern of axiological alliance between J2 and J4 tends to hold up for all the dimensions of value. As previously noted, the same may be said for J1 and J3. Finally, judges J2 and J4 assign the highest levels of the Systemic (S) to Babson’s human values, in apparent defiance of the fact that our values and those of Babson are all cherished values to some degree. Later in our “Discussion and Correspondence” section we discuss the issue of “existential loadings” on all values, no matter whose values.

Thus, J1 (*Table 5*) more consistently sees Intrinsic (I) sensitivity in all of Babson’s twenty-four values than J2, whose approach is twice as variable (Std. Dev. of 16.3 vs. 32.2 respectively). J2’s tendency is to see a wider range of I, E, S involvement in Babson’s values, and in this respect the approach more nearly resembles that of J4. J2 and J4 simply don’t sense the more even handed involvement of I, E, S sensitivities among Babson’s core values that J1 and J3 experience. J2 sees the contribution of the Systemic (S) as differing widely among Babson’s core values, far more than judges J1 and J3. In this respect the evaluative cognitive schema of J2 more nearly resembles that of J4 whose estimate of the level of Systemic (S) involvement is the highest (42.9%) and the most variable (Std. Dev. = 38.9%) and far ranging as in assigning levels of 0% and 100% in some cases. Perhaps we will find in the following “Discussion and Correspondence” section J4’s rationale for this atypical approach to Babson’s core values reflected in means of 42.9% Systemic, 40% Extrinsic, and 17.08% Intrinsic. If you push up the Systemic (S), something has to give, and in J4’s case it is the Intrinsic (I), which falls as low as 17.08% against the 38.7%, 24.8%, and 38.9% estimates of J1, J2, and J3 respectively.

In *Tables 5 and 6* we note that J2 exhibits the highest degree of variability when assigning dimensional weights. This tendency makes J2 second to J4 in assigning Systemic (S) weight (*Table 7*) to Babson’s core values. J4’s measure of variability approaches 40.0 and is the highest recorded for the four judges who render decisions concerning the level of I, E, S involvement with Babson’s values. This means that

J4 sees extreme degrees of dimensional involvement, especially with respect to Systemic (S) sensitivity. That's a lot of variability when assigning I, E, S elements to Babson's axiological compounds. J4 sees the contribution of the Systemic (S) as widely differing among Babson's values—far more than the other judges; and in the “Discussion and Correspondence” section J4 shares his reasons for doing so.

The mean scores given in *Tables 5-7* reflect the overall proportions of Intrinsic (I), Extrinsic (E), and Systemic (S) sensitivity the four judges see in Babson's twenty-four values taken collectively, as a whole. J1 (*Table 5*) assigns an Intrinsic (I) weight of 38.71% to Babson's twenty-four values in question. This is J1's estimate of the average involvement of the Intrinsic (I) dimension across all twenty-values in question. J1 assigned an Extrinsic (E) weight of 38.21%, and Systemic weight of 23.08%. These weights are given in % and by definition must mathematically add up to 100%, (allowing for rounding errors), as shown in *Table 8*. *Table 8* is a summary of data offered in *Tables 5, 6, 7*. Here we can quickly eye-ball the mean % allocation of each dimension of value to all of Babson's values taken collectively. We're averaging % I, E, S involvement with all Babson values. From these data we may conclude that J4 “sees” Babson's values as largely reflecting Extrinsic (E = 40.0%) and Systemic (S = 42.9%) sensitivity, and minimal Intrinsic (I = 17.1%) sensitivity (*Table 8*).

None of the other judges agree with J4's low I = 17% average loading on the twenty four Babson values, or with his J4's high Extrinsic E = 40% and Systemic S = 42.9% loadings. This range or spread of 17% to 42.9% dimensional involvement with Babson's core values is not seen in the axiological signatures of the other judges. Does this variability indicate a strong ability to discriminate the involvement of I, E, S dimensions (axiological elements) with Babson values (axiological compounds)? Or is the measure of variability (Std. Dev.) indicative of the lack of standardization, or of rules governing the meaning and use of I, E, S dimensions of value-vision and its derivative beliefs and thought styles at the level of cognitive content? Is such variability indicative of a failure to subscribe to my premise involving the constant reciprocal co-play and counter-play among the dimensions of value. I detect that the judges may hold different assumptions concerning the reciprocal dynamism among I, E, S dimensions if value. If so, this might account for differences in variability measures across judges and for the range of variability of 16.3 to 32.2 for the Intrinsic (I), 20.3 to 37.1 for the Extrinsic (E), and 13.1 to 39.0 for the Systemic (*Table 8*).

Can we speak of a judge being more confident and systematic when his variability scores are low, as seen with J1 given by I variability = 16.3; E variability = 20.3; S variability = 13.4? The corresponding variability for J4 is given by I variability = 40.0, E variability = 35.6, and S variability = 39.0. J4's variability in assigning I, E, S contributions to Babson's values fall in a wide range from a low of 17.1% to a high of 42.9%, with associated Std. Dev. = 27.1% and 39.0% respectively. Moreover, no judge rejects Intrinsic (I) involvement or sensitivity, where Babson values are concerned, to the extent that J4 does (the low score of

17.1%). Instead, J4 assigns considerably higher levels of Extrinsic (E = 40.0%) and Systemic (S = 42.9%) sensitivity to Babson's values, with associated measures of variability of Std. Dev. = 35.6% and Std. Dev. = 39.0% respectively (*Table 8*).

Table 8 reveals how three judges (J1, J2, J3) emerge as more nearly in agreement among themselves with respect to attributing Intrinsic (I) sensitivity to Babson's values than they are with J4, whose % contribution of the Intrinsic to Babson's values taken as a whole is a mean of 17% vs. means of 38.7%, 24.8%, and 39.0%. The closest we get to a four-judge agreement comes with estimating the Extrinsic sensitivity of Babson values (J1 = 38.2%; J2 = 48.3%; J3 = 33.3%; J4 = 40.0%). These values represent the best we can expect by way of inter-judge agreement in this study. It gives us a base-line and benchmarks the highest level of agreement reached among our judges in assigning an axiological signature to Babson's values taken collectively. This is not replicated in their assignment of Intrinsic (I) and Systemic (S) sensitivities to the twenty-four values in question.

The degree to which our judges differ among themselves goes from a relative low of 10% for the Extrinsic (E = 43% - 33%), 22% for the Intrinsic (I = 39% - 17%), and 26% for the Systemic (S = 39% - 13%). The range of Intrinsic (I) and Systemic (S) differences among the judges is more than double that found for Extrinsic (E) sensitivity (*Table 8*). What is there about the Extrinsic (E) dimension of valuation that favors this coherence or congruence of judgment on the part of our judges when projecting I, E, S dimensions (axiological elements) onto Babson's values (axiological compounds)? Does this concern the question of existential involvement with all values and valuations, including the presence of the intrinsic in the systemic, or vice versa? Why can't the relative harmony of Extrinsic (E) judgments rendered by our judges prevail across all dimensions of value? The precise range of Intrinsic (I) judgments is given by 39.0% - 17.1%; that for Systemic (S) judgments is given by 42.9% - 23.1%, and that for Extrinsic (E) judgments is given by 43.3% - 33.3%. We return to such questions in the "Discussion and Correspondence" section that follows.

We look at the data differently in *Tables 9, 10 and 11*, where the mean scores are computed differently. Each mean represents the average decision of four judges concerning the contributions of Intrinsic (I), Extrinsic (E) and Systemic (S) dimensions to each of Babson's twenty-four values. Here we "collapsed" over the judges (*Tables 9a, 10a, 11a*) instead of "collapsing" over twenty-four values (*Tables 5, 6, 7, 8*) in computing the mean scores. We also do something extra: we add *Tables 9b, 10b, and 11b*. *Tables 9a, 10, 11a* present the average estimates of all four judges, whereas *Tables 9b, 10b, and 11b* present the average estimates of only three judges. Given the tendency of J4 to assign extremes of 0% and 100% I, E, S weights or sensitivities to Babson's values (*Table 1*), I excluded J4 and took the mean of the remaining judges for the comparison shown in *Tables 9b, 10b, and 11b*.

In discussing results so far, I have either collapsed over Babson's twenty-four values to obtain mean Intrinsic (I), Extrinsic (E), and Systemic (S) loadings on them taken collectively, or I've collapsed over Judges to obtain how they "voted" as a

panel of four judges when considering the I, E, S contributions to Babson's values taken individually.

Data presented in *Tables 9a, 9b, 10a, 10b, 11a, 11b* give the average "vote" of our panel of expert judges concerning their estimated level, in percent, of the I, E, S "elements" in each of Babson's twenty-four "compound" values. They indicate how the judges performed collectively, as a group, in assigning our axiological elements to Babson's axiological compounds, invoking the analogy with chemistry previously mentioned. In all cases our judges cast their "votes" based on artistic applications of their respective expertise as axiological scientists in a manner that is meant to be more heuristic than definitive. We're exploring the everyday implications and potential applications of our evolving axiological science in a manner that encourages thinking outside the box. What could be more important than this on the frontier of two major paradigm shifts involving axiological science and its foremost application, axiological psychology?

As previously argued, the role of artistic and intuitive speculation on the frontier of a new science is grist for the mill of this pilot study aimed at exploring the nature of that science. The habitual cognitive processes of the mind-brain system (I, E, S) dedicated to valuation are worthy of being studied from as many different perspectives as possible, and with as many everyday approaches as possible.

We will now focus on the average judgment of our two panels of four (*Tables 9a, 10a, 11a*) vs. three (*Tables 9b, 10b, 11b*) judges. J4 is excluded from the panel of judges who produced the data summarized in *Tables 9b, 10b, 11b*. We now consider the mean performance of either all four judges, or three of the four judges. The atypical approach of J4 prompted this treatment of the data. He is included *Table 9a, 10a, 11a* results and excluded in *Table 9b, 10b, 11b* results.

The following conclusions stand out when comparing the means of four judges (*Tables 9a, 10a, 11a*) vs. the means of three judges (*Tables 9b, 10b, 11b*). Consider the results for the Intrinsic (I) summarized in the *Table 9a* vs. *9b*. The presence of J4 (*Table 9a*) impacts the results as follows: Twenty-one of Babson's values lose Intrinsic (I) weight while "Loyalty," "Integrity," "Prosperity," and "Follows Service" gain Intrinsic (I) weight. This specific impact on the Intrinsic (I) results in a mixed shifting of Extrinsic (E = *Tables 10a* vs. *10b*) and Systemic (S = *Tables 11a* vs. *11b*) weights in compensation for the general tendency for J4 to assign less weight to the Intrinsic (I) when contemplating Babson's core values. Can we conclude from this difference of opinion, or any difference of opinion among expert judges, that more work in the fields of axiological science and psychology is needed to account for this? Thoughts expressed in the "Discussion and Correspondence" section of this pilot study bear on this question. *In general, we find the influence of J4's assessment has the effect of lowering the level of intrinsic involvement, and this is seen by comparing the following four Babson values presented in Tables 9b vs. 9a.* Here the shift in the Intrinsic (I) is from 42% down to 31.8% for "Ideas," 66% down to 49.5% for "Truth," 73% down to 57.5% for "Be True," and 44% down to 33% for "Ideals." For the Extrinsic (E) (*Tables 10b* vs. *10a*), J4's inclusion yields

the following mean values: 54% to 43% for “If Work Stops, Values Decay,” 55% to 41.25% in the case of “Study,” 51% to 38.75% in the case of “Use Your Head,” and 36% to 27.5% in the case of “Never Try Never Win.”

These data also reveal that our judges can agree when assigning Intrinsic (I) weight to some of Babson core values. The three and four judge panels assign 74.33% and 75.75% Intrinsic (I) weight to “Spirituality,” as might be expected. Here the concept of “Spirituality” has a universal Intrinsic (I) appeal among all our judges, which cannot be said all Babson values. The three judge panel assigns more Intrinsic (I) weight than the four judge panel because of J4’s vote. My working assumption is that all of Babson’s compound value-attitudes, at the level of value-more important than this on the frontier of two major paradigm shifts involving axiological science and its foremost application, axiological psychology?

As previously argued, the roles of artistic and intuitive speculation on the frontier of a new science is grist for the mill of this pilot study aimed at exploring the depth and nature of our new science. The habitual cognitive processes of the mind-brain system dedicated to valuation (I, E, S) are worthy of being studied from as many different perspectives as possible.

I now focus on the average judgment of our two panels of four judges (Four Judge Panel: *Tables 9a, 10a, 11a* vs. Three Judge Panel: *Tables 9b, 10b, 11b*). J4’s exclusion from the panel gives us a three judge panel. We now consider average (mean) decision of the Three and Four Judge Panels in allocating I, E, S weights to each of Babson’s twenty-four values, considered individually. The atypical approach of J4 prompted this treatment of the data. J4 is included in the Four Judge Panel, yielding results summarized in *Tables 9a, 10a, 11a*. J4 is excluded from the Three Judge Panel, yielding results summarized in *Tables 9b, 10b, 11b*. In this exercise I am collapsing over judges to measure their mean performance. (Elsewhere, I discuss collapsing over Babson’s twenty-four values to measure the average presence of I, E, S dimensions in all judges taken collectively. This distinction is worth keeping track of in studying the data recorded in *Tables 1-20*.)

The following conclusions stand out when comparing the average decisions of four judges (*Tables 9a, 10a, 11a*) vs. the average decisions of three judges (*Tables 9b, 10b, 11b*). Let’s now consider the comparative findings for the Intrinsic (I) summarized in the *Table 9a* vs. *9b*. The presence of J4 (*Table 9a*) impacts the comparative results as follows: twenty-one of Babson’s values lose Intrinsic (I) importance (weights), while “Loyalty,” “Integrity,” and “Prosperity Follows Service” gain Intrinsic (I) importance or weight. J4’s impact on the Intrinsic (I) is accompanied by a shifting of Extrinsic (E = *Tables 10a* vs. *10b*) and Systemic (S = *Tables 11a* vs. *11b*) weights. For J4 to assign less importance to the Intrinsic (I) when contemplating Babson’s core values, something has to give. By definition, our unit of measurement, the percent (%), must add up to 100% in allocating I%, E% and S% to Babson’s values. Can we conclude from the different approaches of the judges that our theory and science of values fails to provide the sufficient standardization and guidelines we have come to expect of science? Are we to

conclude that we need to revisit our theory of value in the context of empiricism, and not merely formal logic as in hypothetico-deductive reasoning devoid of empirical legs to stand on? With this in mind, a "Discussion and Correspondence" section concludes this Pilot Study.

In general, J4's influence has the effect of lowering the level of intrinsic importance, where Babson's core values are concerned. This is seen in comparing the following four Babson values given in *Tables 9b vs. 9a*. The shift in Intrinsic (I) weight or importance is from 42% to 31.8% for "Ideas," 66% down to 49.5% for "Truth," 73% to 57.5% for "Be True," and 44% to 33% for "Ideals." For the Extrinsic (E) dimension, (*Tables 10b vs. 10a*), J4's impact on the average results given by four judges yields the following shifts in means: 54% to 43% for "If Work Stops, Values Decay," 55% to 41.25% for "Study," 51% to 38.75% for "Use Your Head," and 36% to 27.5% for "Never Try Never Win."

These data also reveal that our judges do agree now and then. The common ground among them is especially strong when they assign the importance of Intrinsic (I) sensitivity to many of Babson core values. The three and four judge comparisons result in assigning 74.33% and 75.75% Intrinsic (I) weights respectively to "Spiritual Power." The concept of "Spiritual Power" seems to hold nearly universal Intrinsic (I) appeal for our judges. This cannot be said of all Babson values. My working assumption is that all of Babson's compound value-attitudes, at the level of axiological content (as opposed to axiological mechanisms), are made up of varying degrees of all three axiological elements or value-dimensions (I, E, S). However, not all of our judges agree with this, as revealed in the "Discussion and Correspondence" section that follows. In the case of "Spiritual Power," the agreement around the Intrinsic (I) is strong and compelling (74.33% vs. 75.75%) as opposed to values such as "Keep Out of Debt" (7.5% vs. 10.0%), "Be on Time" (14.25% - 19.0), or "Never Try, Never Win" (11.75% - 15%), which reflect inter-judge disagreements in axiologically and/or intuitively "detecting" the presence of I, E, S mechanisms in Babson's values. *Table 1* spells out the manner in which each judge approached the task of assigning elemental axiological weights to Babson's values on a value by value basis. Here we first detect the similar approaches of J1 and J3, on the one hand, and J2 and J4 on the other. These data give the first hint that our expert judges form two clusters in axiological space (*Table 20*), reflecting a lack of theoretical and scientific precision that invites us to revisit our theory and in the context of empiricism rather than mere formal logic. This emerging lack of coherence among our judges is something we ought to look into.

Tables 11a, 11b present data reflecting the average decisions made by our four esteemed judges, all experts in the field of emerging axiological science, concerning the importance of the Systemic (S) to Babson values. *Tables 10a and 10b* do the same for Extrinsic (E) importance. These data identify which of Babson values gain or lose Extrinsic (E) and Systemic (S) loadings as a consequence of the influence of J4's vote on the relative importance of I, E, S in Babson's values.

For example, four judges have an average Systemic (S) loading of 37.75% on “If Work Stops,” whereas three judges, without J4’s vote, give an average loading of 23.66%. In the case of “Use Your Head,” the shift is from 51.25% to 35.00%. This reflects the willingness of J4 to assign greater importance to the Systemic (S) when contemplating Babson’s values on a value by value basis. The remaining judges (J1, J2, J3) assign greater importance to the Extrinsic (E) (51.66% vs. 38.75%, *Tables 10b* vs. *10a*) and Intrinsic (I) (13.33% vs. 10.00%, *Tables 9b* vs. *9a*) dimensions when contemplating Babson’s individual human values. *Table 1* very clearly parses the axiological preferences of judges when assigning I%, E%, and S% weights or importance to Babson’s core values. *Tables 9 – 11* provide additional information concerning the variability (Std. Dev.) of judgments made by our judges.

J4’s focus on Systemic (S) sensitivities in this context is significant. He raises Systemic (S) involvement (importance) as follows: “Ideas” (49% to 60.75%), “If Work Stops, Values Decay” (23% to 37.75%), “Study” (25% to 43.75%), “Truth” (26% to 44.5%), “Be True” (16% to 32.5%), “Use Your Head” (35% to 51.25%), “Ideals” (52% to 64.5%), “Intelligence” (54% to 65.75%). (See *Table 10b* vs. *Table 10a* for these comparisons)

There are at least two exceptions to this pattern where J4 votes for less, not more, Systemic (S) involvement with Babson’s values—“Loyalty” (44% down to 35.75%), and “Never Try, Never Win” (37% down to 28.25%). In summary, J4 finds and interprets more Systemic (S) involvement than the other three judges when contemplating “Ideas,” “If Work Stops, Values Decay,” “Study,” “Truth,” “Be True,” “Use Your Head,” “Ideals, and “Intelligence.”

Tables 12, 13, 14, 15 allow us to look at these data in a very different way. Here we invoke the correlation coefficient in order to glimpse how J1, J2, J3, J4 juggle or balance the I, E, S sensitivities they assign to Babson’s core values. In the cases of three judges, (J1, J2, and J3), there are strong negative correlations involving the Intrinsic (I) and Extrinsic (E) dimensions of value-vision when attributing I, E, S weights or importance to Babson’s values. The correlation between the Intrinsic (I) and Extrinsic (E) for J1 is $r = -0.75$, $p < .000$. This defines J1’s I-E Axis of cognitive processing. This cognitive processing axis, dedicated to valuation, is also strongly present in J2’s decision-making $r = -0.78$, $p < .000$). The same axis strongly defines J3’s axiological style $r = -0.83$, $p < .000$). This axis of cognitive processing is absent in J4’s decisions concerning Babson’s values ($r = -0.25$, which is not statistically significant). Here we have one of the strongest reasons why J4 defines a region in axiological space (*Figure 20*) all his own, with J2 acting as a “bridge judge” between J4 and the other two judges (J1, J3). These highly significant correlations (often $p < .000$) confirm my working hypothesis concerning the co-play and counter-play among the I, E, S dimensions of value-vision. I don’t think this finding is merely an artifact of dealing with a unit of measure, the percent, where everything must add up to 100%. This is true, but even within this constraint there is meaningful wiggle room (a meaningful signal to noise ratio in the data) reflecting how judges make the axiological decisions they are called upon to make

in this Pilot Study. I believe these strong correlations (*Tables 12, 13, 14, 15*) support an interconnectedness (yoked dynamisms) among the I, E, S dimensions of valuation such that it's not unreasonable to find the Intrinsic (I) in the Systemic (S) and vice versa. This view is contested by J4 as revealed in the following "Discussion and Correspondence" section.

Data in *Table 15* shows how J4 balances the I, E, S dimensions of value-vision when assigning them to Babson's values and how he goes about it in a very different way from the other judges (*Tables 12, 13, 14*). The reciprocal dynamisms for J4 are mainly concentrated in the Extrinsic (E) – Systemic (S) axis of value-vision, to cognitive processing dedicated to value vision. The correlation in this dimension is an astounding $r = -0.739$, with an associated probability of $p < .000$. The axis dominating the axiological decision-making for J1, J2, and J3 is different and shared by all three of these judges. In their cases, the Intrinsic (I) – Extrinsic (E) axis rules (*Tables 12, 13, 14*), as seen in correlations reaching the level of $r = -0.754$, $p < .000$ for J1; $r = -0.777$, $p < .000$ for J2, and $r = -0.830$, $p < .000$ for J3. These highly significant and meaningful correlations strongly distinguish them from J4's axiological and thought styles when assigning degrees of I, E, S importance to Babson's values. This finding is all the more interesting given J4's standing as one of our premier experts in the field of theoretical axiology. J4 and J2 have in common their extensive knowledge of Hartman's theory. J1 is especially, and critically, acquainted with Hartman's mathematical model and derivative value profiling methodology.

Are we in the "weeds?" Are we making mountains out of mole hills? Are we onto something that our theory and science needs to grapple with? I plan to publish data in the future in which I draw on a panel of "novice judges" (i.e., my university students) and more expert judges. In this respect, I invite all interested readers to send me your estimates of I, E, S involvement with Babson's values. Please indicate your level of axiological expertise on a scale of 0 (low) to 10 (high).

J4 is not entirely alone in axiological space (*Figure 20*). His "cluster partner" is J2. Some distance away are J1 and J3, who have in common the dominance of the Intrinsic (I) – Extrinsic (E) axis of cognitive processing dedicated to values and valuations. In spite of the commonalities between J2 and J4, J2 breaks ranks with J4 by favoring the Intrinsic (I) – Extrinsic (E) axis of cognitive processing dedicated to the value-vision that J4 rejects (*Table 13* vs. *Table 15*). In J4's case the I-E Axis is silent, squelched $r = -0.252$, $p = .235$, nsig). For J4, the cognitive tension (dissonance) around the dominance of the Systemic (S) - Intrinsic (I) $r = -0.465$, $p = .022$) and Systemic (S) - Extrinsic (E) $r = -0.739$, $p < .000$) models of assigning I, E, S importance is resolved by minimizing the role of the I-E Axis of cognitive processing. This cognitive style defines J4's approach to the task assigned him.

As previously noted, J1 and J2 share the dominance of the Extrinsic (E) in relation to both the Intrinsic (I) and the Systemic (S) when examining Babson's values. The Extrinsic is the cognitive focus in axiological processing for J1 and J2. For J4, the Systemic (S) is the focus of axiological processing. For J3, the cognitive

focal point is the Intrinsic. These patterns are easily detected in the correlational data summarized in *Tables 12, 13, 14, and 15*.

Thus, cognitive processing, favoring the I-E dynamism or axis of axiological processing involving the Intrinsic (I) and Extrinsic (E) dimensions of value-vision, is not that engaged in J4's judgments concerning Babson's values. By contrast, it is highly involved in the decisions of J1, J2, and J3. Clearly, J4 favors S-E processing and trade-offs at the impressive level of $r = -0.739$, $p < .000$. J4 also favors the S-I axis of interactions to the tune of $r = -0.465$, $p = .022$ (See *Table 15*). Summarizing, judges J1 and J2 anchor their decisions in the Extrinsic (E). J3 anchors his decisions in the Intrinsic (I). J4 anchors his decisions in the Systemic (S). For J1 and J2, the active-center of cognitive processing dedicated to valuation is located in the E-I and E-S axes of cognitive processing. For J3, this command and control function is centered more in I-E and I-S operations. J4 favors the S-I and S-E operations. (See *Tables 12, 13, 14, 15* correlations).

If there is a "center of cognitive gravity" in "cognitive space," then where J4 is concerned, that center belongs to the Systemic (S), while his "axiological partner," J2, operates out of the Extrinsic. This is seen by comparing data in *Tables 13 and 15*. Correlations in *Table 13* of $r = -0.777$, $p < .000$ and $r = -0.515$, $p = .010$ define J2's focus when balancing the dimensions of value while assigning their relative importance to Babson's values at the level of axiological content. This tells us something about how J4 and J2 make the necessary trade-offs in the present context. One may conclude that J4's Systemic (S) bias and J2's Extrinsic (E) bias (in the present context) represent command and control centers of the sort that belong to the Prefrontal Cortex (PFC) of the brain, although this reductionism invites the chicken and egg question: Is mind or brain pulling the axiological strings? I recall Bertrand Russell's quip about dining with his father, who was fond of saying, "Matter? Never mind! Mind? No matter!"

We must consider the mind-brain system when speculating about the mechanisms and contents of axiological reasoning. Perhaps the MRIs of neuroscience will one day merge with axiological science to give us a deeper understanding of what is going on. The reciprocal dynamisms among the I, E, S dimensions is supported by these correlational findings (*Tables 12, 13, 14, 15*). We have had numerous occasions to refer to the strength of the Systemic (S) – Intrinsic (I) axis of cognitive processing $r = -0.739$, $p < .000$) that is especially strong for J4 as compared to J2 (*Tables 13 vs. 15*). The observed common ground among J1, J2, and J3 finds J2 acting as a "bridge" of sorts between J1, J3, and J4, as depicted in the axiological space of *Figure 20*.

Tables 16, 17, 18, 19 are bar graphs representing how our esteemed judges assigned relative Intrinsic (I), Extrinsic (E), and Systemic (S) "weights" to each of Babson's twenty-four values listed along the x-axis. In the case of J1 (*Table 16*, I, E, S), we see a more even presence of I, E, S in Babson's core values than that given by J2 and J4 (*Tables 17 and 19*). In looking for variability in the approaches of our judges we find it within and between judges, for example in J1's handling of I and

E vs. S (Table 16), and in J1 vs. J4 (Table 1 vs. Table 19). However, this variability still yields to a tendency for J1 and J3 to define one cluster and J2 and J4 to define another in axiological space (Figure 20).

Can we conclude that the relative evenness of distributions found in Tables 16 and 18 support my working hypothesis of interactions among the dimensions of value? As you read the following "Discussion and Correspondence" section, you might want to reflect on this question and others I've raised.

BABSON'S VALUES	JUDGE 1			JUDGE 2			JUDGE 3			JUDGE 4		
	I	E	S	I	E	S	I	E	S	I	E	S
IDEAS	17	20	63	50	0	50	60	10	30	0	0	100
HELP MOTHER	52	32	16	20	60	20	55	35	10	40	40	20
KINDNESS	45	40	15	80	0	20	70	10	20	60	30	10
LOYALTY	55	22	23	20	0	80	55	15	30	60	30	10
IF WORK STOPS VALUES DECAY	37	42	21	0	80	20	30	40	30	10	10	80
BE ON TIME	37	25	38	0	80	20	20	30	50	0	50	50
GET A JOB	37	52	11	0	80	20	25	50	25	0	80	20
INDUSTRY	42	35	23	0	80	20	0	65	35	0	80	20
INTEGRITY	66	20	14	70	0	30	40	30	30	80	10	10
KEPP OUT OF DEBT	10	75	15	0	80	20	20	30	50	0	80	20
SAVE	10	75	15	0	70	30	30	40	30	0	80	20
SPIRITUAL POWER	63	0	37	80	0	20	80	5	15	80	10	10
STUDY	40	40	20	0	70	30	20	55	25	0	0	100
TRUTH	53	24	23	80	0	20	65	0	35	0	0	100
WORK	35	55	10	10	80	10	20	60	20	0	80	20
BE CLEAN	22	65	13	0	80	20	40	30	30	0	80	20
BE TRUE	65	20	15	80	0	20	75	10	15	10	10	80
PROSPERITY FOLLOWS SERVICE	20	60	20	0	100	0	30	50	20	20	70	10
USE YOUR HEAD	30	55	15	0	70	30	10	30	60	0	0	100
IDEALS	42	10	48	20	0	80	70	0	30	0	0	100
INTELLIGENCE	42	15	43	0	20	80	20	40	40	0	0	100
NEVER TRY NEVER WIN	27	50	23	0	20	80	20	70	10	0	100	0
INITIATIVE	27	50	23	25	50	25	20	70	10	10	80	10
COURAGE	55	35	10	60	20	20	60	25	15	40	40	20

Table 1.

Summary of % I,E,S Levels Assigned by Four Judges to Babson's Core Values

INTRINSIC VALUE-VISION			Judge 2	Judge 3	Judge 4
Judge 1	Pearson Correlation		.648**	.527**	.631**
	Sig. (2-tailed)		.001	.008	.001
	N		24	24	24
Judge 2	Pearson Correlation	.648**		.802**	.603**
	Sig. (2-tailed)	.001		.000	.002
	N	24		24	24
Judge 3	Pearson Correlation	.527**	.802**		.526**
	Sig. (2-tailed)	.008	.000		.008
	N	24	24		24
Judge 4	Pearson Correlation	.631**	.603**	.526**	
	Sig. (2-tailed)	.001	.002	.008	
	N	24	24	24	

Table 2.

Intrinsic Inter-Judge Correlations

EXTRINSIC-VALUE-VISION		Judge 1	Judge 2	Judge 3	Judge 4
Judge 1	Pearson Correlation		.722**	.539**	.704**
	Sig. (2-tailed)		.000	.007	.000
	N		24	24	24
Judge 2	Pearson Correlation	.722**		.640**	.558**
	Sig. (2-tailed)	.000		.001	.005
	N	24		24	24
Judge 3	Pearson Correlation	.539**	.640**		.657**
	Sig. (2-tailed)	.007	.001		.000
	N	24	24		24
Judge 4	Pearson Correlation	.704**	.558**	.657**	
	Sig. (2-tailed)	.000	.005	.000	
	N	24	24	24	

Table 3.

Extrinsic Inter-Judge Correlations

SYSTEMIC VALUE-VISION		Judge 1	Judge 2	Judge 3	Judge 4
Judge 1	Pearson Correlation		.522**	.165	.484*
	Sig. (2-tailed)		.009	.441	.017
	N		24	24	24
Judge 2	Pearson Correlation	.522**		.071	.251
	Sig. (2-tailed)	.009		.743	.236
	N	24		24	24
Judge 3	Pearson Correlation	.165	.071		.435*
	Sig. (2-tailed)	.441	.743		.033
	N	24	24		24
Judge 4	Pearson Correlation	.484*	.251	.435*	
	Sig. (2-tailed)	.017	.236	.033	
	N	24	24	24	

Table 4

Systemic Inter-Judge Correlations

INTRINSIC	N	Min	Max	Mean	Std. Deviation
Judge 1	24	10.00	66.00	38.7083	16.32943
Judge 2	24	.00	80.00	24.7917	32.15043
Judge 3	24	.00	80.00	38.9583	23.12439
Judge 4	24	.00	80.00	17.0833	27.10353
N =4 Judges	24				

Table 5.

Assignment of Intrinsic Sensitivity to Babson's 24 Values Taken Collectively by Four Judges

EXTRINSIC	N	Minimum	Maximum	Mean	Std. Deviation
Judge 1	24	.00	75.00	38.2083	20.25915
Judge 2	24	.00	100.00	43.3333	37.14445
Judge 3	24	.00	70.00	33.3333	21.55209
Judge 4	24	.00	100.00	40.0000	35.63096
N = 4 Judges	24				

Table 6.

Assignment of Extrinsic Sensitivity to Babson's 24 Values Taken Collectively by Four Judges

SYSTEMIC	N	Minimum	Maximum	Mean	Std. Deviation
Judge 1	24	10.00	63.00	23.0833	13.35117
Judge 2	24	.00	80.00	31.8750	23.62812
Judge 3	24	10.00	60.00	27.7083	13.10320
Judge 4	24	.00	100.00	42.9167	38.95138
N = 4 Judges	24				

Table 7.

Assignment of Systemic Sensitivity to Babson's 24 Values Taken Collectively by Four Judges

Judge	Intrinsic		Extrinsic		Systemic		I% + E% + S% = 100%
	m.	s.d.	m.	s.d.	m.	s.d.	
1	38.7%	16.3	38.2%	20.3	23.1%	13.4	100%
2	24.8%	32.2	43.3%	37.1	31.9%	23.6	100%
3	39.0%	23.1	33.3%	21.6	27.7%	13.1	100%
4	17.1%	27.1	40.0%	35.6	42.9%	39.0	100%

Table 8.

Summary of The Mean Partitioning of I,E,S Sensitivities for All Babson's Values Taken Collectively by 4 Judges

BABSON'S VALUES	INTRINSIC	Minimum	Maximum	Mean	Std. Deviation
01-Ideas	4	.00	60.00	31.7500	28.02826
02-Help Mother	4	20.00	55.00	41.7500	15.88238
03-Kindness	4	45.00	80.00	63.7500	14.93039
04-Loyalty	4	20.00	60.00	47.5000	18.48423
05-If Work Stops, Values Decay	4	.00	37.00	19.2500	17.19254
06-Be On Time	4	.00	37.00	14.2500	17.85824
07-Get a Job	4	.00	37.00	15.5000	18.55622
08-Industry	4	.00	42.00	10.5000	21.00000
09-Integrity	4	40.00	80.00	64.0000	17.04895
10-Keep Out of Debt	4	.00	20.00	7.5000	9.57427
11-Save	4	.00	30.00	10.0000	14.14214
12-Spiritual Power	4	63.00	80.00	75.7500	8.50000
13-Study	4	.00	40.00	15.0000	19.14854
14-Truth	4	.00	80.00	49.5000	34.79943
15-Work	4	.00	35.00	16.2500	14.93039
16-Be Clean	4	.00	40.00	15.5000	19.34770
17-Be True	4	10.00	80.00	57.5000	32.27486
18-Prosperity Follows Service	4	.00	30.00	17.5000	12.58306
19-Use Your Head	4	.00	30.00	10.0000	14.14214
20-Ideals	4	.00	70.00	33.0000	30.04441
21-Intelligence	4	.00	42.00	15.5000	20.02498
22-Never Try, Never Win	4	.00	27.00	11.7500	13.86542
23-Initiative	4	10.00	27.00	20.5000	7.59386
24-Courage	4	40.00	60.00	53.7500	9.46485
N = 24 Values	4				

Table 9a.

Four-Judge Mean Intrinsic Sensitivity for Babson's 24 Values

<i>INTRINSIC</i>	N	Minimum	Maximum	Mean	Std. Deviation
<i>01-Ideas</i>	3	17.00	60.00	42.3333	22.50185
<i>02-Help Mother</i>	3	20.00	55.00	42.3333	19.39931
<i>03-Kindness</i>	3	45.00	80.00	65.0000	18.02776
<i>04-Loyalty</i>	3	20.00	55.00	43.3333	20.20726
<i>05-If Work Stops Values Decay</i>	3	.00	37.00	22.3333	19.65536
<i>06-Be on Time</i>	3	.00	37.00	19.0000	18.52026
<i>07-Get a Job</i>	3	.00	37.00	20.6667	18.87679
<i>08-Industry</i>	3	.00	42.00	14.0000	24.24871
<i>09-Integrity</i>	3	40.00	70.00	58.6667	16.28906
<i>10-Keep Out of Debt</i>	3	.00	20.00	10.0000	10.00000
<i>11-Save</i>	3	.00	30.00	13.3333	15.27525
<i>12-Spiritual Power</i>	3	63.00	80.00	74.3333	9.81495
<i>13-Study</i>	3	.00	40.00	20.0000	20.00000
<i>14-Truth</i>	3	53.00	80.00	66.0000	13.52775
<i>15-Work</i>	3	10.00	35.00	21.6667	12.58306
<i>16-Be Clean</i>	3	.00	40.00	20.6667	20.03331
<i>17-Be True</i>	3	65.00	80.00	73.3333	7.63763
<i>18-Prosperity Follows Service</i>	3	.00	30.00	16.6667	15.27525
<i>19-Use Your Head</i>	3	.00	30.00	13.3333	15.27525
<i>20-Ideals</i>	3	20.00	70.00	44.0000	25.05993
<i>21-Intelligence</i>	3	.00	42.00	20.6667	21.00794
<i>22-Never try, Never Win</i>	3	.00	27.00	15.6667	14.01190
<i>23-Initiative</i>	3	20.00	27.00	24.0000	3.60555
<i>24-Courage</i>	3	55.00	60.00	58.3333	2.88675
<i>N = 24 Babson Values</i>	3				

Table 9b

Three-Judge Mean Intrinsic Sensitivity for Babson's 24 Values

BABSON'S VALUES	EXTRINSIC	Minimum	Maximum	Mean	Std. Deviation
01-Ideas	4	.00	20.00	7.5000	9.57427
02-Help Mother	4	32.00	60.00	41.7500	12.60622
03-Kindness	4	.00	40.00	20.0000	18.25742
04-Loyalty	4	.00	30.00	16.7500	12.73774
05-If Work Stops, Values Decay	4	10.00	80.00	43.0000	28.68217
06-Be On Time	4	25.00	80.00	46.2500	24.95830
07-Get a Job	4	50.00	80.00	65.5000	16.76305
08-Industry	4	35.00	80.00	65.0000	21.21320
09-Integrity	4	.00	30.00	15.0000	12.90994
10-Keep Out of Debt	4	30.00	80.00	66.2500	24.28134
11-Save	4	40.00	80.00	66.2500	17.96988
12-Spiritual Power	4	.00	10.00	3.7500	4.78714
13-Study	4	.00	70.00	41.2500	30.10399
14-Truth	4	.00	24.00	6.0000	12.00000
15-Work	4	55.00	80.00	68.7500	13.14978
16-Be Clean	4	30.00	80.00	63.7500	23.58495
17-Be True	4	.00	20.00	10.0000	8.16497
18-Propserity Follows Service	4	50.00	100.00	70.0000	21.60247
19-Use Your Head	4	.00	70.00	38.7500	30.65262
20-Ideals	4	.00	10.00	2.5000	5.00000
21-Intelligence	4	.00	40.00	18.7500	□6.52019
22-Never Try, Never Win	4	.00	50.00	27.5000	22.17356
23-Initiative	4	50.00	80.00	62.5000	15.00000
24-Courage	4	20.00	40.00	30.0000	9.12871
N = 24 Values	4				

Table 10a.

Four-Judge Mean Extrinsic Sensitivity for Babson's 24 Values

<i>EXTRINSIC</i>	N	Minimum	Maximum	Mean	Std. Deviation
<i>01-Ideas</i>	3	.00	20.00	10.0000	10.00000
<i>02-Help Mother</i>	3	32.00	60.00	42.3333	15.37314
<i>03 Kindness</i>	3	.00	40.00	16.6667	20.81666
<i>04-Loyalty</i>	3	.00	22.00	12.3333	11.23981
<i>05-If Work Stops Values Decay</i>	3	40.00	80.00	54.0000	22.53886
<i>06-Be on Time</i>	3	25.00	80.00	45.0000	30.41381
<i>07-Get a Job</i>	3	50.00	80.00	60.6667	16.77299
<i>08-Industry</i>	3	35.00	80.00	60.0000	22.91288
<i>09-Integrity</i>	3	.00	30.00	16.6667	15.27525
<i>10-Keep Out of Debt</i>	3	30.00	80.00	61.6667	27.53785
<i>11-Save</i>	3	40.00	75.00	61.6667	18.92969
<i>12-Spiritual Power</i>	3	.00	5.00	1.6667	2.88675
<i>13-Study</i>	3	40.00	70.00	55.0000	15.00000
<i>14-Truth</i>	3	.00	24.00	8.0000	13.85641
<i>15-Work</i>	3	55.00	80.00	65.0000	13.22876
<i>16-Be Clean</i>	3	30.00	80.00	58.3333	25.65801
<i>17-Be True</i>	3	.00	20.00	10.0000	10.00000
<i>18-Prosperity Follows Service</i>	3	50.00	100.00	70.0000	26.45751
<i>19-Use Your Head</i>	3	30.00	70.00	51.6667	20.20726
<i>20-Ideals</i>	3	.00	10.00	3.3333	5.77350
<i>21-Intelligence</i>	3	15.00	40.00	25.0000	13.22876
<i>22-Never try, Never Win</i>	3	20.00	50.00	36.6667	15.27525
<i>23-Initiative</i>	3	50.00	70.00	56.6667	11.54701
<i>24-Courage</i>	3	20.00	35.00	26.6667	7.63763
<i>N = 24 Babson Values</i>	3				

Table 10b

Three-Judge Mean Extrinsic Sensitivity for Babson's 24 Values

BABSON'S VALUES	Systemic	Minimum	Maximum	Mean	Std. Deviation
01-Ideas	4	30.00	100.00	60.7500	29.47739
02-Help Mother	4	10.00	20.00	16.5000	4.72582
03-Kindness	4	10.00	20.00	16.2500	4.78714
04-Loyalty	4	10.00	80.00	35.7500	30.64175
05-If Work Stops, Values Decay	4	20.00	80.00	37.7500	28.52338
06-Be On Time	4	20.00	50.00	39.5000	14.17745
07-Get a Job	4	11.00	25.00	19.0000	5.83095
08-Industry	4	20.00	35.00	24.5000	7.14143
09-Integrity	4	10.00	30.00	21.0000	10.51982
10-Keep Out of Debt	4	15.00	50.00	26.2500	16.00781
11-Save	4	15.00	30.00	23.7500	7.50000
12-Spiritual Power	4	10.00	37.00	20.5000	11.73314
13-Study	4	20.00	100.00	43.7500	37.72157
14-Truth	4	20.00	100.00	44.5000	37.56328
15-Work	4	10.00	20.00	15.0000	5.77350
16-Be Clean	4	13.00	30.00	20.7500	6.99405
17-Be True	4	15.00	80.00	32.5000	31.75426
18-Prosperity Follows Service	4	.00	20.00	12.5000	9.57427
19-Use Your Head	4	15.00	100.00	51.2500	37.50000
20-Ideals	4	30.00	100.00	64.5000	31.42716
21-Intelligence	4	40.00	100.00	65.7500	29.19332
22-Never Try, Never Win	4	.00	80.00	28.2500	35.76194
23-Initiative	4	10.00	25.00	17.0000	8.12404
24-Courage	4	10.00	20.00	16.2500	4.78714
N = 24 Values	4				

Table 11a.

Four-Judge Mean Systemic Sensitivity for Babson's 24 Values

<i>SYSTEMIC</i>	N	Minimu m	Maximum	Mean	Std. Deviation
<i>01-Ideas</i>	3	30.00	63.00	49.3333	17.21434
<i>02-Help Mother</i>	3	10.00	20.00	15.3333	5.03322
<i>03 Kindness</i>	3	15.00	20.00	18.3333	2.88675
<i>04-Loyalty</i>	3	23.00	80.00	44.3333	31.08590
<i>05-If Work Stops Values Decay</i>	3	20.00	30.00	23.6667	5.50757
<i>06-Be on Time</i>	3	20.00	50.00	36.0000	15.09967
<i>07-Get a Job</i>	3	11.00	25.00	18.6667	7.09460
<i>08-Industry</i>	3	20.00	35.00	26.0000	7.93725
<i>09-Integrity</i>	3	14.00	30.00	24.6667	9.23760
<i>10-Keep Out of Debt</i>	3	15.00	50.00	28.3333	18.92969
<i>11-Save</i>	3	15.00	30.00	25.0000	8.66025
<i>12-Spiritual Power</i>	3	15.00	37.00	24.0000	11.53256
<i>13-Study</i>	3	20.00	30.00	25.0000	5.00000
<i>14-Truth</i>	3	20.00	35.00	26.0000	7.93725
<i>15-Work</i>	3	10.00	20.00	13.3333	5.77350
<i>16-Be Clean</i>	3	13.00	30.00	21.0000	8.54400
<i>17-Be True</i>	3	15.00	20.00	16.6667	2.88675
<i>18-Prosperity Follows Service</i>	3	.00	20.00	13.3333	11.54701
<i>19-Use Your Head</i>	3	15.00	60.00	35.0000	22.91288
<i>20-Ideals</i>	3	30.00	80.00	52.6667	25.32456
<i>21-Intelligence</i>	3	40.00	80.00	54.3333	22.27854
<i>22-Never try, Never Win</i>	3	10.00	80.00	37.6667	37.23350
<i>23-Initiative</i>	3	10.00	25.00	19.3333	8.14453
<i>24-Courage</i>	3	10.00	20.00	15.0000	5.00000
<i>N = 24 Babson Values</i>	3				

Table 11b

Three-Judge Mean Systemic Sensitivity for Babson's 24 Values

JUDGE 1		Intrinsic	Extrinsic	Systemic
Intrinsic	Pearson Correlation		-.754**	-.079
	Sig. (2-tailed)		.000	.713
	N		24	24
Extrinsic	Pearson Correlation			-.595**
	Sig. (2-tailed)			.002
	N			24
Systemic	Pearson Correlation			
	Sig. (2-tailed)			
	N			

** . Correlation is significant at the 0.01 level (2-tailed).

Table 12.

Judge 1: Manipulation of I,E,S in Generating an Average "Axiological Signature" for All 24 Babson Values

Judge 2		Intrinsic	Extrinsic	Systemic
Intrinsic	Pearson Correlation		-.777**	-.140
	Sig. (2-tailed)		.000	.515
	N		24	24
Extrinsic	Pearson Correlation		1	-.515**
	Sig. (2-tailed)			.010
	N		24	24
Systemic	Pearson Correlation			
	Sig. (2-tailed)			
	N			

** . Correlation is significant at the 0.01 level (2-tailed).

Table 13.

Judge 2: Manipulation of I,E,S in Generating an Average "Axiological Signature" for All 24 Babson Values

Judge 3		Intrinsic	Extrinsic	Systemic
Intrinsic	Pearson Correlation		-.830**	-.399
	Sig. (2-tailed)		.000	.053
	N		24	24
Extrinsic	Pearson Correlation			-.180
	Sig. (2-tailed)			.401
	N			24
Systemic	Pearson Correlation			
	Sig. (2-tailed)			
	N			

** . Correlation is significant at the 0.01 level (2-tailed).

Table 14.

Judge 3: Manipulation of I,E,S in Generating an Average "Axiological Signature" for All 24 Babson Values

Judge 4		Intrinsic	Extrinsic	Systemic
Intrinsic	Pearson Correlation		-.252	-.465*
	Sig. (2-tailed)		.235	.022
	N		24	24
Extrinsic	Pearson Correlation			-.739**
	Sig. (2-tailed)			.000
	N			24
Systemic	Pearson Correlation			
	Sig. (2-tailed)			
	N			

*. Correlation significant at the 0.05 level (2-tailed).

** . Correlation significant at the 0.01 level (2-tailed).

Table 15.

Judge 4: Manipulation of I,E,S in Generating an Average "Axiological Signature" for All

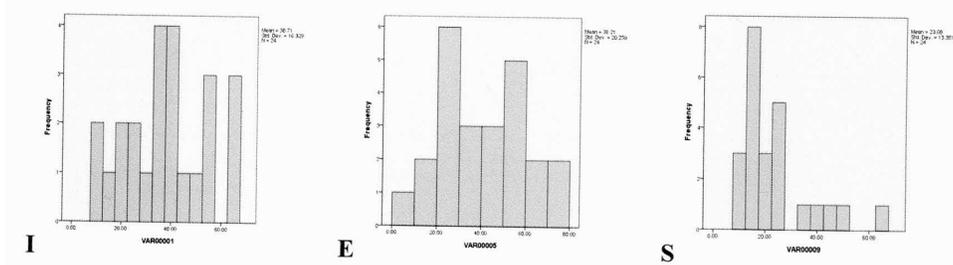


Table 16.

Judge 1: I,E,S “Axiological Signatures” for Babson’s 24 Values (y-axis = % contribution; x-axis = 1-24 Babson Values)

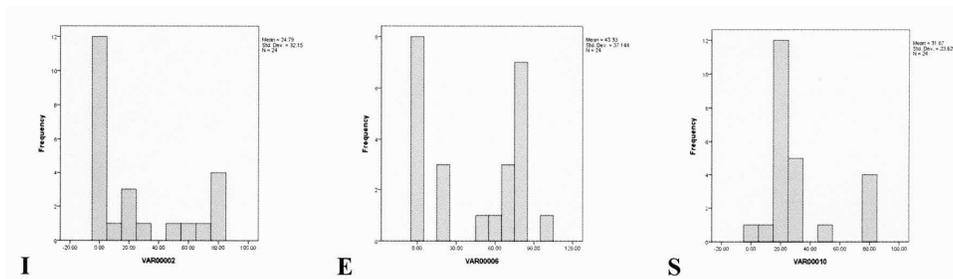


Table 17.

Judge 2: I,E,S “Axiological Signatures” for Babson’s 24 Values (y-axis = % contribution; x-axis = 1-24 Babson Values)

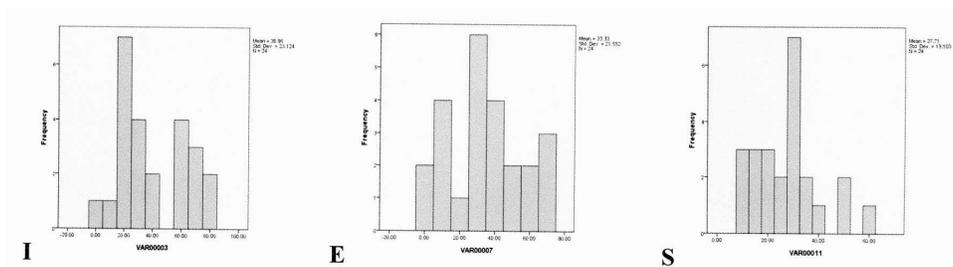


Table 18.

Judge 3: I,E,S “Axiological Signatures” for Babson’s 24 Values (y-axis = % contribution; x-axis = 1-24 Babson Values)

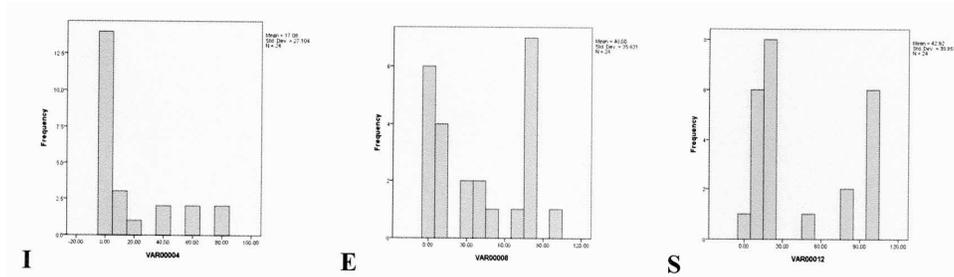


Table 19.

Judge 4: I,E,S “Axiological Signatures” for Babson’s 24 Values
(y-axis = % contribution; x-axis = 1-24 Babson Values)

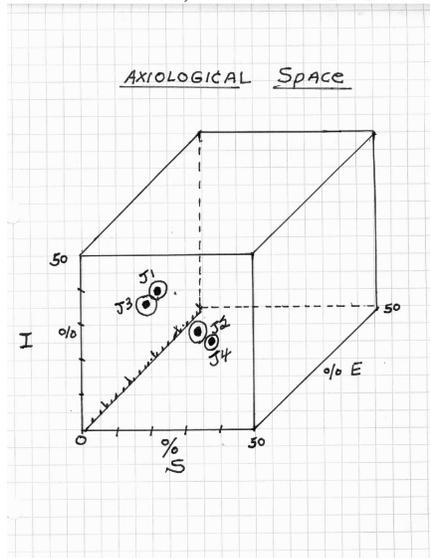


Figure 20.

4. Discussion and Correspondence

Judges J1, J2, and J3 are in closer agreement in assigning axiological signatures to each of Babson twenty-four human values. The same may be said for their axiological characterization of all twenty-four values taken together or collectively. Judge J4’s approach to the open-ended task before him was atypical, as seen in the tabled data. His assignment of I, E, S sensitivities to Babson’s individual values and combined values departed from the approach taken by J1, J2, J3. In order to gain a better understanding of similarities and differences among the judges, I now quote from some of the correspondence between us.

With their permission, I now identify the judges who kindly served on the panel of experts, as follows: J1 is Colonel Frank Forrest, PhD, of Daytona Beach, Florida;

J2 is Arthur Ellis, PhD, of Blountville, Tennessee; J3 is Uli Vogel, PhD, of Munich, Germany, and J4 is Rem B. Edwards, PhD, of Knoxville, Tennessee. The correspondence cited next consists mostly of direct quotations from e-mail correspondence, with a few minor editorial liberties taken by me.

Leon Pomeroy to J4: "Dear Rem: I appreciate your second try. Your approach is different from the other judges. J1 and J3 more nearly reflect my premise of reciprocal dynamisms between and among the dimensions of value. I've always assumed a rich co-play and counter-play among them. Given this premise, it is easy for me to view the intrinsic as contained within the systemic and vice versa. The same would hold for all pair-wise interactions of our three dimensions of value.

I would assign percentage contributions of I and E to "Ideas," in addition to the more obvious and prominent participation of the Systemic (S). Would you agree that "Ideas," no matter whose ideas, always come alive within us in some to some degree. This view argues for ego involvement with all ideas to some degree. We might call this an "existential loading" on all ideas held by all people. As a scientist-clinician with a private practice, I'm aware of how often people are inclined to identify ideas with personhood or identity such that they are inclined to think "... a bad idea is a bad me, and a good idea is a good me." I therefore subscribe to the premise that there is an existential (I) element or component (I) to all ideas and that its level is never zero. I would argue that there is no such thing as "pure ideas," our "pure Systemic (S)," in the real world. This is a useful theoretical construct for modelling behaviour, as in approximating behaviour, but we must blur the concept when applying it to everyday human behaviour, if that makes any sense.

J4 to Leon Pomeroy: "Dear Leon: I'd like to make a suggestion concerning your project. I understand you wish submit blogs to *Psychology Today* in the future to put axiological psychology on the map, and that Roger Babson's twenty-four values carved in granite by the Norwegian stone mason is a possible vehicle for this purpose. I think this is very praiseworthy; but this particular project (pilot study) of estimating I, E, S contributions to each of the human values in question may not be suitable for a Blog aimed at a general audience. To the uninitiated person, this project might seem vague, limited, and over their heads. This approach is highly subjective, and to my knowledge there is nothing of this sort in the axiological literature. Therefore, I recommend you substitute a project in which determining the relative contributions of I, E, S to Babson's values be accompanied by a few axiological and clinical psychology introductions and interpretations, which you are pre-eminently qualified to provide. Your *Psychology Today* following might then find this approach useful in examining the priorities of their own value systems."

Leon Pomeroy to J4: "I agree with you. I plan to take your advice. However, my intention in conducting this pilot study is to promote a dialogue among ourselves (the experts) in hopes of exploring more deeply what we've learned so far. I hope that out of this can come powerful new ideas with which to reach the wider world. This "in house" pilot study can help us share and explore the expertise we all have developed over the years and perhaps facilitate the finding of common ground

among us. I'm interested in sharing both our expertise and intuition so as to take our understanding of axiological science to deeper levels in the spirit of an ongoing conversation among ourselves."

J4 Responds to Leon Pomeroy: "Thanks for your response to my weighing of IES contributions. I agree with your claim that "'mere ideas'" don't exist. Ideas created by humans for humans and a measure of existential involvement in them cannot be avoided. They all carry "existential loads" admitting to degrees that fall along a continuum." Ideas do indeed come alive to us to some degree and by degrees, but not every degree counts as intrinsic valuation. Not every existential load is intrinsic; some are extrinsic, some systemic.

I still disagree with your claim that the intrinsic is included in the systemic. This claim is incompatible with your preceding claim that the existential loads are "admitting to degrees that fall along a continuum." If we take the "degrees" point seriously, as Hartman clearly did, we have to say that systemic valuation consists of minimal emotional involvement (which should not be confused with no involvement at all). Systemic valuation is objective and "detached" or "disinterested," as Hartman often said, but not "uninterested". At the other extreme, intrinsic valuation consists of maximal emotional/personal involvement (intense love, devotion, compassion, concentration, etc.).

Claiming that the intrinsic is within the systemic is logically incoherent. It asserts that minimal affective involvement is maximal affective involvement. You give a lot of attention to how Babson valued the 24 values he had carved on the stones. However, I do not believe that we were instructed to rank how HE would weigh them. This is something we could never know. Instead, I believe, your instructions did not clarify whether we should assess the items Babson's way, our own, or whatever. Doing it my way, as far as I am concerned "ideas" are just ideas (S), although "useful ideas" would be (S^E) and "cherished ideas" would be (S^I).

Clarifying his position further, J4 to Leon Pomeroy: "Here is my reasoning for assigning only systemic value to "ideas." To mere "ideas" I would assign only systemic value. To "useful ideas" I would assign both systemic and extrinsic value. To "cherished ideas" I would assign both systemic and intrinsic value. Only to "useful and cherished ideas" would I assign systemic, extrinsic, and extrinsic value. I agree that the systemic can be included in the intrinsic, but not that the intrinsic is included in the systemic, which is what all the other judges seem to assume. Not all ideas "come alive" for us. Only those that are both useful and/or cherished do that. Some are just "ideas," which is what we were called upon to assess in your survey."

Leon Pomeroy Drafts a Response to J4 while waiting for two others to join our panel of judges. In the wait, this draft fell through the cracks and was never sent to J4. I include it now by way of adding to the correspondence section of this pilot study: "As to your views regarding the inclusion of the intrinsic in the systemic, I find your approach interesting and want to explore it further. I sense that Babson's values, chiselled into large granite boulders, meant a lot to him and how he hoped they would guide and inspire others in the difficult times that followed the Great

Depression. I naturally assumed Babson's introspection concerning his personal values was meaningful and that he cherished the values he identified as contributing to his happiness and success in life. I hope this pilot study with our panel of judges, all with their own expertise and intuitions, will help us explore more deeply our emerging axiological science and its range of implications and potential applications. With the help of our judges and perhaps more volunteer judges in the future, I hope to glean more from this and other novel approaches to our new science.

I see we have found some common ground around your thought that "...the systemic can be included in the intrinsic." I'm still thinking about your conclusion: "...but not the intrinsic in the systemic." Practically speaking, you have a point that not all ideas come alive within us. Usually, those that do are often unconscious and well linked to emotions. Ideas can begin as highly conscious intellectual thoughts. Over time, with repeated use, they become internalized or alive within us. I like to think of all ideas as alive within us to varying degrees; but never zero. Those that are highly conscious and intellectual in nature often seem detached from affect or emotion and therefore existential loadings; but I suspect they are never completely detached, and there is ego investment in all our thinking; but it is the more deeply internalized ideas that drive emotions and motivations. I hope this makes sense.

With the "mother-of-all-minds," the *Zeitgeist*, the spirit-of-the-times, and the *weltanschauung* pressing on us I see *no* way to break totally free of the contingent worth epidemic upon us. This epidemic of contingent worth ideation or thinking is only being addressed by clinicians when people find themselves drowning in a sea of problems in living. A more proactive psychology would address this epidemic of projecting the Intrinsic onto the Systemic so as to mitigate many of the problems in living costing our society billions of dollars annually.

Some die for their ideas, some romanticize their ideas, some lapse into true-believers, some become pathologically dissociated and detached from their ideas. Maybe here we have the emergence of "mere ideas" on a pathological, rather than a nominal, basis. I don't see any way to avoid a continuum or spectrum of existential loadings on ideas that is never zero nor infinite but exists along a "range of convenience" dictated by the selective pressures of biosocial and psychosocial evolution.

My premise continues to be one of reciprocal dynamisms among all the dimensions of valuation such that the intrinsic exists in the systemic and vice versa. This is to say there is a rich co-play and counter-play among them along a spectrum of conviction born of degrees of internalization. Perhaps in the future axiological theory needs to examine these views in greater depth. I am opposed to assigning 100% I, 100% E, 100% S; or 0% I, 0% E, 0% S to any of the dimensions of value vision. I'm also inclined to view Babson's "Truth," and truth-in-general, as both useful (E) and cherished (I) from his perspective and my own. In assigning percentages of I, E, S to Babson's values, I stand in my own shoes and approach the task in much the same way I would take the Hartman Value Profile (HVP)."

J4 replies during the editing process to Pomeroy's preceding reflections. "Leon, I agree with much that you say above, but I think that when you insist that the

intrinsic is within the systemic, you consistently ignore the important distinctions between systemic evaluation as minimal or disinterested involvement, extrinsic evaluation as more intense practical involvement, and intrinsic evaluation as maximally intense involvement.

You and I very much agree when you write, “Practically speaking, you have a point that not all ideas come alive within us;” and “I like to think of all ideas as alive within us to varying degrees; but never zero.” I fully agree that ideas that “intellectual in nature often seem detached from affect or emotion and therefore existential loadings; but I suspect they are never completely detached and that there is ego investment in all our thinking.” We disagree because you think that this counts in favor of the intrinsic within the systemic, whereas I insist that this is nothing more than mere systemic involvement. You tacitly assume that rational systemic “disinterestedness” or “objectivity” is no involvement at all, that it is the same as uninterestedness or “zero.” But disinterestedness is definitely not the same thing as uninterestedness; it is certainly not what you call “pathological detachment.” *Rational* disinterestedness is indeed a kind of “ego investment,” but only minimally so, and it is definitely not the same as the maximal “ego investment” of intrinsic evaluation. Zero *intrinsic* involvement is not the same as no involvement at all, as you assume. It still leaves plenty of room for much *systemic and extrinsic* involvement. With “mere ideas,” my existential involvement is merely systemic or disinterested—but definitely not uninterested, and definitely not intrinsic.

Thus we can relate existentially to ideas in three ways. We can approach some ideas “objectively” with only the minimal interestedness that does not interfere with unprejudiced judgment. We can approach some ideas practically as useful for everyday purposes. And we can approach some ideas passionately with total ego investment, as do those “[who] die for their ideas, ...fanatics, [and]...true-believers.” When I assign “0 %” to intrinsic and “100 %” to systemic involvement with “mere ideas,” I am not saying that there is no existential involvement at all. I am saying only that we are 100% involved only minimally with what we evaluate purely systemically. I just can’t get very excited over “Two plus two equals four;” but “This is a very useful thought” is much more interesting; and “I love you,” said truthfully to my wife, expresses profound intrinsic involvement. And that’s the TRUTH, though not always useful or cherished.”

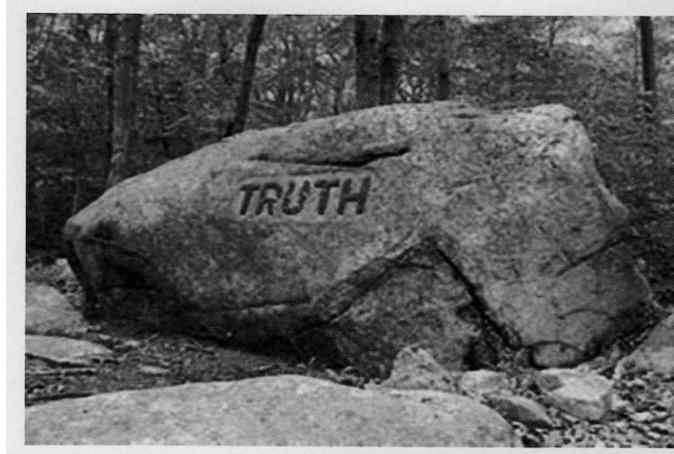


Figure 21

Truth: A Useful and Cherished Value Carved on a Granite Boulder at Dogtown

J3 to Leon Pomeroy: “I tended to do the exercise by responding to each item (Babson values) in the same way a person is encouraged to respond to items when taking the HVP. Thus, my ratings may not include all three dimensions, because I believe I was reacting to the items as “values” rather than my own “valuations.” The “values” approach, in my mind, has more “purity,” whereas “valuation” will have the imposition of my “self” into the equation, and therefore would likely have more Intrinsic component.”

Leon Pomeroy Responds to J3: “I suppose it comes down to whose shoes we’re standing in. When we take the HVP we’re standing in our own shoes. We could take the HVP standing in society’s shoes. We could take the HVP standing in the shoes of someone else. We could contemplate Babson’s values by putting ourselves in Babson’s shoes. Does this make sense? That is the question our judges face in this open ended pilot study of “Babson’s Boulders.”

J4 to Leon Pomeroy: On another matter, I have had some additional thoughts about our earlier discussion of whether there is any involvement of the intrinsic self with systemic value objects. I believe that a distinction can be made in terms of which both of us might be right in a sense about this. I spell this out in more detail in other publications, but in my *THE ESSENTIALS OF FORMAL AXIOLOGY* book (p. 106), I recognize that there are two meanings for the intrinsic self in Hartman, thus two meanings for intrinsic evaluation of any object of value. First, there is the intrinsic self as the *WHOLE SELF* that includes all of its values and valuation capacities in all three value dimensions—but it is not necessarily wholly involved. Second, there is the intrinsic self as the *DISTINCTIVELY INTRINSIC SELF* which includes only the self’s highest or most intense values and evaluations—the ones that

are not included in the two other value-self dimensions. Here we find the most complete personal and emotional involvement and identification with valued objects. In application, this means that there is a sense in which the intrinsic self really is involved with the systemic evaluation of systemic value objects, namely, the WHOLE SELF is involved. And in this respect, you were right in your original judgment about this. However, since only the impartial, disinterested, objective aspects of this whole self are relevant, there is no DISTINCTIVELY INTRINSIC involvement in the whole self's systemic evaluation of systemic value objects, so the WHOLE SELF IS NOT WHOLLY INVOLVED INTRINSICALLY. I hope this doesn't muddy the waters too much!"

I invited J1 to share his thoughts concerning his approach to our "Babson's Boulder," project, together with any comments he'd like to make about J4's approach. I end quoting J1's response.

J1 to Leon Pomeroy: "Prior to my comments concerning Judge 4's allocation of I%, E%, and S% to the twenty-four Babson values in question, I would like to share my assumptions as follows:

1. In Part 1 my I% estimate for each value was based on (a) the existence of a person identifying with another person, a tangible object, or an idea, (b) an indication that help, aid, or assistance was being afforded to a person, and c) my feeling skills. My E% estimate was based on existence of things in nature, practicality, and my doer skills. My S% estimate was based on existence of constructs of the mind, intangible things, and my thinker skills.

2. In Part 2 my I% estimate was based on indications of who I am, having self-respect, and my feeling skills. My E% estimate was based on indications on how well I do, what I do, i.e., my doer skills. My S% estimate was based on indications of what I am, and my thinker skills.

3. With respect to Babson's value of "Use your head," I substituted, in my mind, the concepts "*resourcefulness*," "*reasonableness*," and "*intellect*." With respect to the value "Never try never win," I substituted the concept "*persistence*." My comments on Judge 4's unusual allocation of % contributions are based in part on a *comparison of Judge 4's allocations with my own allocations* as follows. (I, Judge 1, will respond with "concur" when I am in agreement with Judge 4. Otherwise, I will provide an explanation for my disagreement with Judge 4. With this in mind, I turn to a consideration of values in question:

1. As to "*courage*," I Concur. 2. "*Ideas*" are primarily S, but a person can identify with an idea and a person's ideas contribute to who he or she is. Ideas may be practical or impractical. *The concept of ideas must have I and E components*. 3. "*Help mother*": I Concur. 4. "*Kindness*": I Concur. 5. "*Loyalty*": I Concur. 6. "*If Work Stops Values Decay*": I think Judge 4's allocation of I% and E % are too low. Upon re-examination of my own allocation of them, I find my estimates too high. 7. "*Be on Time*": Being on time in many instances is motivated by consideration for other people. Perhaps my estimate of 40% for the I-dimension in Part 1 is too high. 8. "*Get a job*": Working for another person, an organization, and for self-support, are

the two sides of an intrinsic (I) coin...the I-aspects of a job are evident. Therefore, I do not agree with Judge 4 that the I% of this value is zero. 9. "Industry": Industry is an institution. It is the result of what people do. Therefore, I think Judge 4's % allocation of 0% is justified and my % allocation of 42.5% is not. 10. "Integrity": I Concur. 11. "Keep out of debt": A small I% allocation for this value is justified based on my feeling skills. 12. "Save": The same comment given for the previous item 11 applies to this value. 13. "Spiritual power": I do not agree that this value has an E% component. 14. "Study": Babson must have identified with studying; for in part that is who he was. Also, studying is practical and is something one does. Therefore, I% and E % allocations for this value are appropriate. 15. "Truth": Truth is also something Babson must have identified with and that contributed to who he was. Adherence to truth is practical and it is something one does. I% and E % allocations for this value are appropriate. 16. "Work": My comment regarding item 8 above applies to this value as well. 17. "Be clean": Personal cleanliness is another value our business man must have identified with and that indicated who he was. Therefore, I do not agree with Judge 4 that the I% of this value is zero. 18. "Be true": I think that the I% of this value should be greatest not the S% . 19. "Prosperity follows service". I Concur. 20. "Use your head": Being resourceful, like being studious, (see value 14) warrants I% and E % allocations. 21. "Ideals": And, so, too, is idealistic. 22. "Intelligence": Ditto for being intellectual. 23. "Never try never win". Being persistent is a value that warrants E% at the highest level; but there are also I% and E% components. 24. "Never try never win": I Concur."

Concluding comments by Judge 4. "I approached this project of ranking Babson's values with great uncertainty and continue to be very uncertain about my rankings. Thus, where J1 and I now disagree, we would probably move toward greater agreement if we could discuss the items directly with one another. In this light, I would like to explain briefly why I included some degree of the practical or extrinsic in "Spiritual Power." As St. Paul said, 'Faith without works is dead.'"

I also have a few thoughts about a projected future article on Babson's Boulders. I believe that this project would be much improved if Pomeroy gave *explicit* instructions about *whose* values are relevant. Are participants to try to imagine how *Babson* valued these items, or are they to assess them as *they themselves* value them, or are they to try to assess them according to their objective Hartman ranking? Most people will not try the latter, but I guess I was intuitively and half-consciously trying to do that when I participated. Maybe I tried it the axiological way, personally affirmed.

At least your directions could and should be explicit about the first two options. And people might be asked to do the project twice, first the Babson way, then their own way. I believe this ambiguity lead to much of the disagreement in the first round of this project. Many people will have reservations about doing it the Babson way because they know little or nothing about Babson. I certainly had this reservation.

Response by Leon Pomeroy. Thanks for taking the time to share your thoughts.

Leaving the instructions open-ended had its purpose. It set the stage for expert judges to project their expertise onto the task in the manner of a Rorschach inkblot test. I needed more expert judges for this purpose. I am very interested in examining how specific instructions will impact the individuality (variability) of judges decisions. This approach promises to eliminate the inter-judge variability evoked by open-ended instructions. It will allow me to probe more deeply and in a more nuanced fashion, the variability and individuality of judges in rendering their decisions, reflecting a mix of individual world-views and culturally shared world-views.

COLLABORATIVE PROBLEM SOLVING THROUGH THE LENS OF VALUE SCIENCE

K. T. Connor

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Abstract

Collaborative problem solving and decision making become more and more important as our world becomes more and more divisive and our problems more complex. This article presents a classic model of problem solving and places it within the conceptualizations of Value Science. It draws implications for developing problem solving skills, optimizing problem solving within teams, and intensifying the awareness of the importance of diversity of perspectives. It espouses the power of a problem solving model that combines the rational and the creative, and it applies the logic of axiology to issues such as styles of problem solving and implications for team building.

Introduction

Everywhere we turn we see signs of conflict. Wars are being fought, citizens are being attacked, populations are rising up against their leaders. Problems abound, both as cause of the unrest and as caused by the unrest.

No one person can stop the sad cycle of aggression, responding to aggression, responding to aggression. A more communal approach to problem solving is called for if we are to ever release ourselves, our countries, and our world from this self-destruction.

Why collaborative problem solving? Isn't the image of a "Lone Ranger" or singular savior inspiring enough without concern for the complexity introduced when more than one person is involved? It is to be acknowledged that group decision

making takes more time than decisions made by one person. Moreover, it is well known that the experience of group decision making and problem solving can be of intense stress and conflict.

Yet the research—and the experience of many of us—is that better decisions come from group efforts.

How, then can we mitigate the downside of working with others in solving problems? That is where a classical process informed by Value Science provides the support. If the problem solving team is in harmony in following a single process, both conflict and time expenditure are reduced. Here a classic process will be presented in some detail as a support for collaborative problem solving. It is a process that allows for a rich solution since multiple perspectives are leveraged. Moreover, it is a process at once rational and creative, thus increasing the probability that aggressive and violent solutions can be eliminated.

Where does axiology come in? Robert Hartman was no stranger to the tragedy of violence and aggression. He knew the value of addressing the problems facing the world in his time in a collaborative way. Thus, it seems appropriate to ask: Is there anything in his legacy that would support efforts to teach people how to do just that? What specifically are the implications of Value Science for effecting collaborative problem solving efforts?

The contention of this article is that the fruits of Hartman's thinking, as studied and extended over the years, give us exciting insights into this area. To demonstrate this, we will explore, first, the nature of problem solving, then review the above mentioned model of creative problem solving, showing the importance of mining *new* solutions to the complex problems facing us, rather than the old or obvious ideas that haven't succeeded. Finally, we will investigate the insights of axiometric research, asking, "How can this provide insight into building problem solving strengths and problem solving teams?"

1. The Nature of Problem solving

A problem is simply a challenge. It is a difference between what one has and what one wants, between what is and what is desired instead. Since a problem points out that something desired is missing, a problem is a motivator—unless, of course, we feel powerless to address the problem. On the other hand, this motivation, if intensified beyond our ability to manage it, can burn us out.

This is why it is so important to consider ways to help ourselves and others face problems "head on" and resolve them effectively before the stress wears us down or the problem destroys us.

Of course, the solutions must fit the problem. There are some problems for which the answer is obvious or at least accessible. Examples of this kind of problem include math problems ($2+2=?$) and problems with "answers at the back of the book." (How do we procure enough materials to manufacture a specified volume of our product?) These problems require knowledge, often persistence, and sometimes even extensive

research. But there are other problems that cannot be solved with research and knowledge alone. For these kinds of problems the answer is not obvious and, indeed, needs to be created, for it does not now exist. Such problems abound in our world today. The situation is unique, or the condition surrounding the problem is complex; in either case, a simple “back of the book” solution is not sufficient. This is why we refer to this kind of problem as a creative problem requiring a Creative Problem Solving process (CPS).

The process described here is a classic one. Readers will probably recognize it immediately as inherent in many problem solving models. It is the process that marks the Creative Education Foundation (<http://creativeeducationfoundation.org>) and its main annual gathering, the Creative Problem solving Institute (CPSI).

Several decades ago, Alex Osborn, the “O” in “BBDO” (the global ad agency) and the formulator of the notion of brainstorming, brought together educators and business people to teach one another how to tap into their creativity. One of his earliest partners in this effort, Sid Parnes, continued the process, initiating an academic program in creative studies, and refining the CPS process and the teaching of it. The fruit of this work will be the core of this article, taking a look at this classic process in light of what we learn from the work of axiology.

2. The Creative Problem solving (CPS) Model

The basic model as it evolved contains six steps: Objective Finding, Fact Finding, Problem Finding, Idea Finding, and Solution Finding. The original model was not copyrighted, since, as Sid Parnes indicates to this day, he never thought it would evolve into something hundreds of people would build their careers upon. It has been adapted, modified, and used in a myriad of subsequently proprietary models (Hurson, 211; Basadur; Isaksen, Dorval and Treffinger). This article will stay with the classic open source model.

Several skills are required in order to navigate effectively along the model. Osborn recommended one of these from the beginning (Osborn, 1953), that of deferral of judgment. Other skills include converging and diverging. Each step in the process involves these last two skills. One first diverges and generates multiple options without judging them or worrying about their usefulness or merit. Then one converges, selecting a few or even one to take further along the process.

The model is simple yet rich if viewed one step at a time.

Step One:

The first step in the process is Objective Finding (OF). This step targets the overall goal of the process. To identify the Objective of the problem solving process, one might ask, “What is unsatisfactory at present, and what does one want instead?” Or, in a more positive note, “What opportunities exist for new breakthroughs or greater benefits?”

As noted above, first a list of possible objectives is developed, then one of these is converged upon to apply the process further. The other objectives in the list are not lost; one can always return to them and carry another one further. For example, I might list “need ways to get more work done in less time,” “need more care in spending,” “want more vacation time.” Imagine that I chose the first one: getting more work done. I can return to any of the others at a later time and begin the process again.

Step Two:

The second step is Fact Finding (FF). In this step one looks at the data surrounding the problem or challenge, asking such questions as, What do I know about this situation? What do I still need to know? How will I recognize that I have achieved what I want in this situation? What motivates me to put the effort into addressing it?

Again a list is generated, this time of facts; then a limited number of facts are selected as most important. My listing might be converged on as, “The good news is that client load has increased,” “I’m working longer hours than I wish,” “We are experiencing missed deadlines,” “We have had unusually high and unexpected expenses this year.”

Step Three:

The third step is Problem Finding. This step involves taking the various facts and turning them into problem statements. Actually, they are turned into problem *questions* since a question is a more open entity and invites responses, whereas a statement brings with it closure. The early model used the question form, “In What Ways Might I...?” (IWWMI)

The facts listed above might become such questions as: “IWWMI reduce the client load?” “IWWMI increase the client load?” “IWWMI increase the number of people handling the client load?” Or even, “IWWMI have the client carry their own load?” All of these questions are generated from the initial fact, “The good news is that the client load has increased.”

Readers probably experience the challenge of deferral of judgment at this point, since some of the IWWMI questions contradict one another. It is critical at this stage to be open to any possible questions as possible problem statements, however illogical or undesirable, as this allows for richer connections to be made. Judgment is not eliminated, just deferred, to be taken up again at each converging stage.

IWWMI question items may be generated from any of the other converged-on facts as well. Once the divergent stage is complete (or the time for it has expired), the convergent process provides the problem question(s) that seem to have the most promise in addressing the problem at this time, at which point the Problem Finding step is complete.

Step Four:

The Idea Finding step generates lists of responses to the problem question, diverging and again deferring judgment. There are many techniques for increasing the generation of ideas, and this is the step where the well-known process of “Brainstorming” is most frequently used, though it can be appropriate at each divergent stage of the process. The important thing is to carefully converge, selecting a limited number of ideas to move forward into the next step. Brainstorming as a process often fails because teams end up with flip chart pages full of ideas with no way to manage them. The convergent step provides this control. The outcome of the convergent stage is a limited number of the most interesting and potentially fruitful ideas, to be refined further in the Solution Finding step.

Step Five:

The Solution Finding step diverges on a list of criteria before even considering the ideas selected in the previous step. For example, if I had selected “IWWMI increase the number of people handling the client load?” as one of the idea-generating problem questions, my criteria might be “remain within budget, please the client, please my boss, be easy to implement, be supportive of the local economy, be ‘green,’ be fun.” In the convergent stage, I would refine this list, then apply it to the ideas I had converged on in the Idea Finding Stage. Once the ideas most reflective of the criteria are selected, the Solution Finding step is complete.

Step Six:

At the Acceptance Finding stage, a list is made of such issues as the possible blocks to achieving this solution, people that will be need to be sold on it, and resources that will need to be procured in order to achieve it. The most important of these is selected and action steps developed, with timelines, aimed at implementing the solution. The Acceptance Finding step has two main parts: gaining acceptance and preparing for action. In fact, some derivative problem solving models have separated this step into two separate steps. It will be apparent when we view this step through the eyes of axiometric analysis that some styles favor one of these foci more than the other.

From the discussion of these steps, it should be apparent that careful progression through each step, in order, will yield a more complete solution. The problem as originally seen may look quite different as the process progresses, but the process allows the team members to be on the same point in the “agenda” at the same time, and enables them to complete one phase of the process (diverging) before entering another (converging). Moreover, it forces them to address the most fruitful aspects of the issue, since the problem has been refined and re-refined. This both saves time and reduces confusion.

It is to be noted that at each step it is possible to cycle back to a previous step. For instance, in selecting solutions, someone may mention a fact that was not

considered at the fact-finding stage. It is possible that this fact may point to a whole new configuration of the problem. Hence, the Problem Finding step could be repeated to see if any of the problem questions generated from that fact might more adequately position the problem. Or the ideas generated may all fail the criteria. Here a team could revert back to the Idea Finding step to generate more ideas. Generally, however, groups who follow the process carefully often find they have no need to cycle back. The process of following each step carefully creates solutions that turn out to be quite effective.

If competent problem solving is achieved by competent fidelity to the process, the questions then arise, “Does everyone have the same ease in following each of the steps?” and “Is there a way to project who might need assistance in one step or another and what that means for building teams?” We go to the fruits of Value Science to consider these.

3. Insights from Axiometric Analysis

Whereas Axiology is the philosophical aspect of Value Science, axiometric methodology provides focus on measuring its various dimensions in individuals and groups. A student of Hartman’s, Wayne Carpenter, has spent the last several decades deeply involved in taking the basic findings of the HVP, deepening the analysis, and extending the measurement of what it captures. The Axiometrics™ system measures general styles of learning, communicating, coaching, selling, and serving. Given one’s results on the HVP, it is possible to determine a general pattern that simplifies the complexity within the individual’s results. It is also possible to extrapolate from these styles implications for problem solving performance, more specifically performance in applying the CPS process.

The patterns used in this article are those reflecting simple value plus valuation relationships. As we know, intrinsic values exist. They can be valued intrinsically, extrinsically, and systemically. Also extrinsic values exist which can in turn be valued intrinsically, extrinsically, and systemically. Finally systemic values exist, which can be valued intrinsically, extrinsically, and systemically. Additional discussion of these styles appears in Connor (1992).

If intrinsic valuation yields Feelers, extrinsic valuation yields Doers, and systemic valuation yields Thinkers, the following styles can be proposed:

	I	E	S
I	Feeler-Feeler	Feeler-Doer	Feeler-Thinker
E	Doer-Feeler	Doer-Doer	Doer-Thinker
S	Thinker-Feeler	Thinker-Doer	Thinker-Thinker

In general terms, the nine styles can be described as follows:

Feeler-Feeler Relies on intuitive hunches and personal involvement; focus is on personal goals and issues; treats each experience as unique and personal.	Feeler-Doer Relies on intuition and common sense to direct decisions; focuses on and translates feelings into action; focuses on satisfying others.	Feeler-Thinker Relies on personal ideas, ideals and beliefs; focus is on commitment, meaning and purpose; connects action to an expression of personal goals.
Doer-Feeler Relies on common sense, street sense and intuition to see and solve problems; confidence through results and involvement; stays 'now' focused.	Doer-Doer Focuses on immediate needs and results; learns by doing and comparing; uses common sense to direct decisions toward practical results.	Doer-Thinker Relies on knowing what to do to ensure success; key is clarity, action, logistics; focuses on what, why and how to support decisions.
Thinker-Feeler Relies on plans and programs to translate personal experience to actions; focuses on consistency of actions with ideas, beliefs and expectations.	Thinker-Doer Acts according to a strategy; focus is on order, effectiveness, efficiency and clarity; learns by adjusting strategy to meet needs and results.	Thinker-Thinker Plans and systems; driven by the need for order, clarity, and conformity; focuses on doing things according to plans, standards and expectations.

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In considering collaborative problem solving, some general style differences will be important. The Doers will tend to be more action oriented and impatient with long drawn out processes. The Thinkers will value the structure and tend to stick with it. The Feelers will be more sensitive to others' views, for better or for worse, and may not always be able to express clearly what they are holistically sensing.

As the level of valuation is introduced (to go from three to nine styles) the differences become more specific.

For example, Feeler-Doers get a gut sense of what the issues are and then use common sense to converge, whereas Feeler-Thinkers converge by deciding what is "right." Doer-Feelers use gut feel to develop practical alternatives. They do this rather than personalize the issues in the way the Feeler-Doer does. Doer-Thinkers are more apt to keep the final results in mind and might distrust gut feel, while Thinker-Doers might be more interested in the rules and research that leads to results, rather than focus mainly on results.

If we take the logic of axiology into account, we can get even more specific in applying these styles to the problem solving process.

Recall the six steps of the Creative Problem solving process This grid from *Wikipedia* organizes the steps according to three basic decision-making elements: exploring the challenge, generating ideas, and preparing for action.

Process Stage	Steps
Explore the Challenge	1. OF–Objective Finding (identify the goal, wish or challenge)
	2. FF–Fact Finding (gather the relevant data)
	3. PF–Problem Finding (clarify the problems that need to be solved in order to achieve the goal)
Generate Ideas	4. IF–Idea Finding (generate ideas to solve the identified problem)
Prepare for Action	5. SF–Solution Finding (move from idea to implementable solution)
	6. AF–Acceptance Finding (plan for action)

The style differences yield different levels of ease in navigating each of the steps. This fact has implications for helping people learn the process, employ the process, and understand others with whom they are collaborating.

Each of the nine styles described above will approach the process in slightly different ways when working through their “automatic pilot.” For instance, the Feeler-Doer will rely on intuition for Step One (OF), and common sense for Step Two (FF). Their sense of what the problem is all about will be difficult to express at first, for they will sense it holistically rather than specifically. On the facts, though, they might be more specific. They won’t be as interested in Step Three (PF), seeing it as useful but not necessary, for they have probably already intuited the problem from the objective. They feel the same way about Step Four (IF) and the planning part of Step Six (AF). They already sense what the problem is and can intuit some solutions (Step Five, SF) immediately from the facts. They do focus on the relational elements in Acceptance Finding, however, being more concerned about the reactions others might have to their solution than about fully detailed action steps.

In short, they will move from OF to FF to SF and focus on how the solution will be received.

The Doer-Thinker, on the other hand, will merge Step One (OF) with Step Three (PF), seeing no need to go further than the issue they start with, and building criteria for solutions (SF) into their idea of the problem. They also merge Step Two (FF) and Step Four (IF). For them, the facts suggest immediate solutions as they focus on Who?, What?, Why?, and How?. They apply the already generated criteria to build concrete action steps and become impatient for the need to consider acceptability (AF). The Doer-Thinker values structure but also values concrete action steps. Unless

they are unconventional thinkers, however, they may become impatient with any exercise that diverges from what they consider to be immediately practical.

4. Implications for Training and Team Building

Taking just these two styles, several implications for training and team building suggest themselves.

For one thing, it is important to affirm that when one step is missed in the process, the quality of the solution and its implementation can suffer. Moreover, experience has shown that when a step is skipped, there is often a breakdown in the process such that there is inherent pressure to revert back to the step that was skipped. For example, imagine that the objective was set (OF) and the group accelerated the Fact-Finding step because of impatience to “get on to something interesting.” When the problem is identified (PF), when possible solutions are identified (IF), and the time has come to apply criteria in order to select a solution (SF), it could very well happen that arguments ensue over facts that surface only now and change the whole complexion of the problem. It could be that a solution that was seen to be reasonable and a possible way forward can now be contested because new facts show that management has already eliminated it as a possible course of action in directives that were communicated some time ago. This course of events could very well throw the problem solving process team back to starting at the beginning, or at least at a much earlier stage. As stated above, it is critical, if one is serious about collaborative problem solving, that each step be followed and followed in order.

But what did our simple analysis of the style differences show us? Both of these styles, if left to their “automatic pilot,” can easily skip steps. The Feeler-Doers will not put the focus on considering possible definitions of the problem and carefully converging on one, nor will they emphasize generating multiple possible solutions and converging on one or a few. The Doer-Thinkers will value structure and maybe not even realize they are moving to action without careful consideration of the impact their solution would have on others.

If the team should be composed of only Feeler-Doers, it could well be that a superficial solution is selected and planned, and the plan is more suggestive than explicit and complete. By allowing their intuitions to move them through the process, they may not utilize the diverging and converging tools as well as they could.

If the team should be composed of only Doer-Thinkers, the process can look very efficient but may have to be reworked. By merging Steps One and Three and Two and Four, they are eliminating not only possible facts that will change the nature of the problem selected, but will tend to move to action steps too quickly to allow consideration of really effective implementation, especially since they don't value including steps that take care of acceptability.

In a word, when left to their natural patterns of thinking, these two styles will produce solutions that may not reach the richness and effectiveness that is possible

or—in the face of critical complex problems—even required. This is true of all the nine styles, each enjoying a different way of modifying the process.

This suggests that good rigorous training in the process skills, as well as commitment to follow the process steps, are a must. Fortunately, the process itself can become a training tool. For example, as Feelers experience the process over and over, their focus on structure can be strengthened. And as they see how rich the outcomes can be when the process is followed, their motivation to follow the process can deepen. The same can happen with the other styles. As Doers are guided to take time for each step and each phase of the step, they can find it easier and easier to consider more facts and to converge more carefully. As Thinkers use the process again and again, they might realize that their original firm conviction of what must be done was far less enriched than the solution that ultimately emerged.

For this reason, it is strongly recommended that the process be well facilitated, preferably by well-trained facilitators. When aware of the style differences that exist and how they are likely to treat each step when left to their “automatic pilot,” the importance of someone who can guide the group through diverging, then converging, Step One, then Step Two, becomes quite clear.

Implications for team building are even more obvious. Consider a team composed of Feeler-Doers and Doer-Thinkers. The Doer-Feelers will get a gut feel about the general direction and then feel a need to support it with common sense facts. Meanwhile, the Doer-Thinkers will be already on the Problem Finding step in their heads, having merged Objective Finding and Problem-Finding. To the Doer-Thinkers, looking ahead is important. To the Feeler Doers, the present is more important. The Feeler-Doers will be quite focused on how the solution selected will be received by others, while the Doer-Thinkers will be impatient with this concern. Logistics will be more important to the Doer-Thinkers than to Feeler-Doers, who might overlook specific details of the action plan altogether.

These differences are both challenges and invitations to enrichment. The challenge lies, once more, in the need for competent facilitation of the steps. The blessing lies in the balance that one style can provide for the other.

When teams can be built from the ground up, style awareness can guide member selection such that at least the intuitive (the Feelers), the pragmatic (the Doers), and the conceptual emphasis (the Thinkers) can be included. This can be accomplished by ensuring that all three style levels are represented, the more diverse the style valuation the better. Of course sometimes one must work with a team that is already formed. When team constitution is a given, understanding the style differences can enable team members to anticipate and moderate the effects of the styles that make up the team. For instance, one style’s impatience or another style’s oversensitivity to acceptability can be expected and taken into account while keeping everyone on the same step at the same time.

One of the many teams the author has worked with included the following team members:

	Feeler	Doer	Thinker
Feeler			
Doer	3 members		5 members
Thinker	1 member		

It should be apparent that there is a tilt toward pragmatics on this team. It is used as an example because this has often been a common imbalance in manufacturing and project management teams.

It was indeed a challenge to facilitate this group in CPS sessions. The logistics-focused 5 Doer-Thinkers were delighted that we had a process and yet found it very difficult to keep from streamlining it. They were quite impatient with any effort to consider alternate framing of the problem, for their logic told them what the problem was, and their drive to action wanted closure.

The 3 Doer-Feelers were even more impatient than the Doer-Thinkers with the process, for the objective told them what the facts should be, and the Idea Finding step turned immediately into solutions for them. They wanted to stop as soon as they found a solution that felt practical.

The lone Thinker-Feeler, meanwhile, was enthralled with the possibility of coming up with a unique solution that was conceptually aligned with the goal of the session. He was more open to thinking through options as long as they didn't violate good taste.

A special task for the facilitator of this group was to help them trust the process, complete each step, and progress to completion of the process. Although the Thinker-Feeler paid attention to the Acceptance Finding aspect of the process, using it as a validation of the thinking he had been applying all along, the Doers were impatient with this step. Common sense, they thought, should show others that the solution they selected was most appropriate.

These are just a few of the kinds of awareness that can develop with the help of a Value Science approach. The approach used here was one version of applied axiology, that of Wayne Carpenter's Axiometrics™, but other style approaches are also possible. Axiometrics International itself has reports dealing with 3 styles (Focus Styles Report), 6 styles (Coaching, Sales, or Service Styles Reports) and 16 styles (Connor, 1996).

Whatever the style analysis used, the advantage of using such a general analysis of thinking patterns is simplicity. Precision in this case takes a back seat to ease of understanding. When teams can appreciate the divergence of styles they possess, making the CPS process effective is both easier and more successful.

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HVP PROJECTION: JOB MATCHING WITH PROFILING VALUES

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Abstract

This article introduces a new European business application of the HVP named V12C (Value-Based 12 Competencies) that supports recruitment and HR-development processes. The V12C focuses on DIM and INT scales, however, it covers all scales of the HVP. While the V12C is powerful when used as a stand alone diagnostic instrument, it provides significant value added in combination with the Position Analysis Tool (PAT), also developed by *profilingvalues*. The PAT is a 120 statements questionnaire that identifies the capabilities required for a specific job or functional role. The PAT is also based on Hartman's scales and mirrors the V12C. This article will show how V12C and PAT help to answer the difficult question of fit between a candidate and a prospective job quickly and thoroughly. The article will also show that the V12C is fully in line with Robert S. Hartman's work, as demonstrated by a correlation study between HVP and V12C.

Introduction

The HVP has been the basis for a variety of successful business applications. Why introduce another one? The idea arose after the Annual Conference of the Robert S. Hartman Institute 2009. Having heard the audience discussing several projects about the fit between a candidate and the specific demands or expectations of a job function, the findings seemed to be both good and difficult at the same time. Good, because some projects showed that a match between a candidate and a specific position was possible. This is great news

considering that every mismatch is usually very expensive. However, the calibration of these job profiles seemed to be quite complex as it requires a lot of benchmark references and shows regional differences. Therefore, I decided to introduce a two-folded approach: a new business application of the HVP focusing on HR aspects – the V12C – and an analysis tool for job requirements that mirrors all scales of the V12C, the PAT.

The V12C covers all scales while focusing on DIM and INT scales. This allows axiological experts and non-experts alike to benefit from the findings. Matches against specific job profiles can take place quickly without the need of software programming or other adjustments. The author is using the scale abbreviations Leon Pomeroy has developed for his broad and in-depth validation studies of the HVP. Thanks to his profound work, companies like *profilingvalues* can rely on a solid scientific basis (Pomeroy, 2005). This article will explain the new business application in four steps.

Introduction of the V12C, showing format and features.

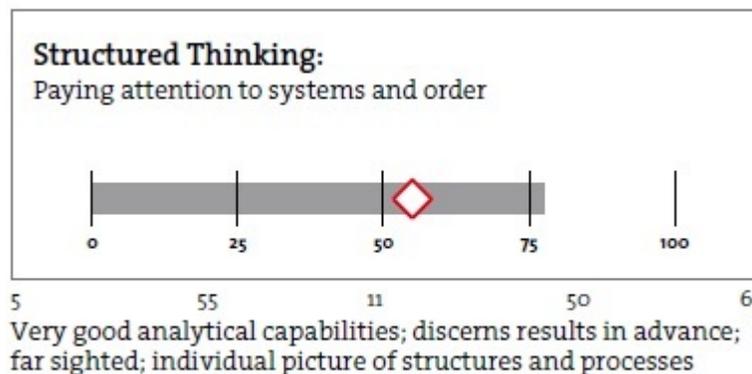
Description of the Position Analysis Tool (PAT) which profiles the specific job.

Match between PAT and HVP-based profiling according to several project examples as well as added value for present and future client needs.

Results from a correlation study between HVP and V12C.

1. Introducing the V12C

The V12C-report is structured to show the results according to the HVP. As the focus is on the needs of the European HR consulting market, some items have been renamed to better reflect business terminology. In general, the main scales are shown in two dimensions: bars for the ability (clarity) and diamonds for the concentration (attentiveness) regarding the respective ability. In the image below, the DIMS1 and VDIMS1 scales of the HVP are shown in one box. The bar has a linear function from 0 to 100 (DIMS1); the diamond has a ‘pendulum’ function (VDIMS1) that is balanced at 50% and is going up or down thus showing either a more proactive or reactive concentration (valence).



Calculating the bar scores: Number of undervaluation plus number of overvaluation as indicated in the picture above via the small figures below the box to the left and right (5 and 6) as well as summed up in the middle (11) times 2 and subtracted from 100. In our example:

$$11 * 2 = 22$$

$$100 - 22 = 78\% \text{ bar length}$$

This means that Hartman’s 7 point scale, from excellent to extremely poor, was transferred to a metric system from 0-100% - accordingly, $100/7 = 14.28\%$.

Calculating the diamond scores: As already pointed out, the diamond has a pendulum function. The objective is clearly not to maximize the diamond at 100%. To the contrary: a position around 50% signals balanced under- and overvaluation. The report shows also a split into negative valences (see example above: 55%, second number from the left below the box) and positive valences (50%, second number from the right) as recommended by David Mefford in order to de-mask the overall valence in case of significant deviations (Mefford, 2010, 83 f.). Different to Hartman, we calculate the valence linearly in order to avoid extreme results due to a 0 throughout over- or undervaluation. Instead of $600/11 = 54.54\%$ by referring to the above example, we calculate under- minus overvaluation multiplied by 5%, going up or down from 50% basic position. In our picture, 6 overvaluations minus 5 undervaluations result in one 5% step up from 50%, i.e. the diamond position is at 55%.

The overall structure of the report is aligned to Robert S. Hartman’s distinction between World and Self as well as to intrinsic, extrinsic, and systemic value dimensions. Therefore, the first matrix of the report refers to the following structural organization (for a complete sample report, please refer to <http://www.profilingvalues.com/recruiting.html>).

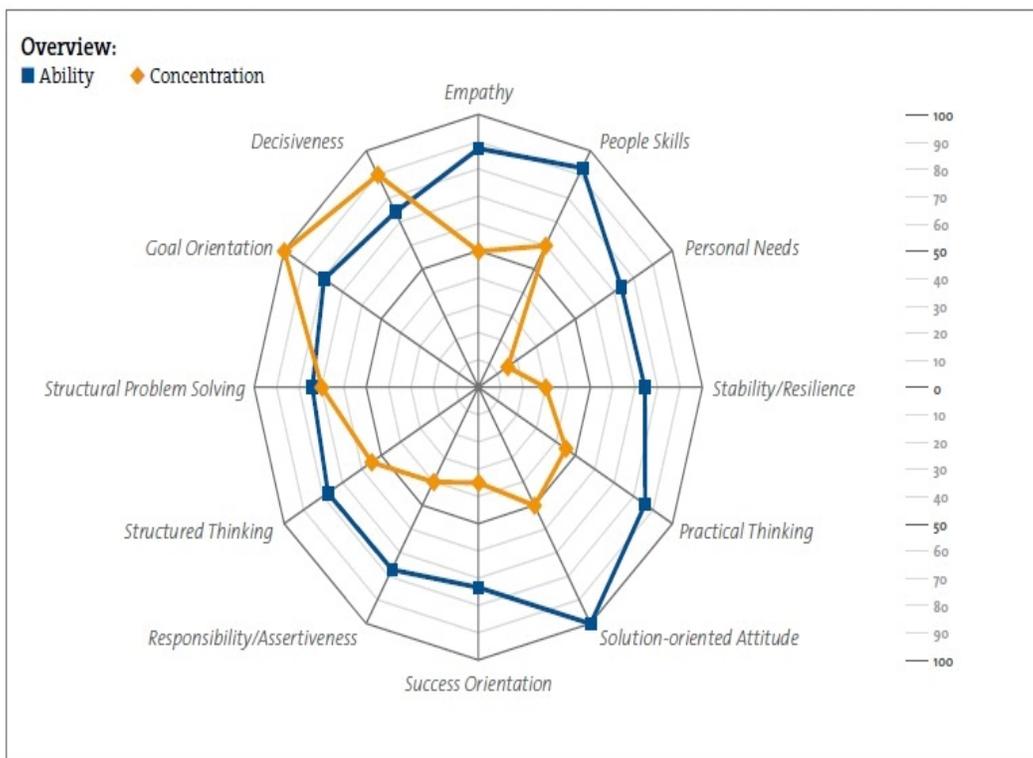
Report-Matrix V12C of profilingvalues: DIM (General Competencies)		
Value Dimension	World	Self
Intrinsic: human	Empathy	Personal Needs
Extrinsic: practical	Practical Thinking	Success Orientation
Systemic: formal	Structured Thinking	Goal Orientation

Due to market requirements, the classical matrix has been enhanced to offer a combined view on all problem solving competencies (INT-scales as well as created VINT-references). Thus, Empathy is complemented by People Skills, Practical Thinking by Solution-oriented Attitude and so forth as the table below shows. The VINT scales are calculated the same way as the VDIM scales by comparing over- and under-valuations in every value dimension:

every single difference minus 2 difference steps. The impact of these valence scores is seen in the same way to e.g. the Dim-I₁⁺ score described in Hartman’s Manual of Interpretation (Hartman, 1973, 136 ff).

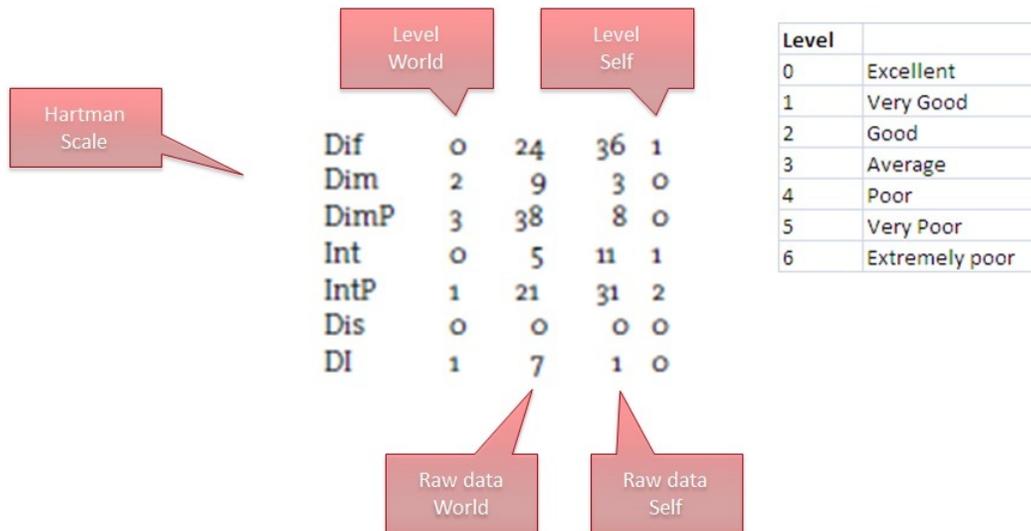
Report-Matrix V12C of profilingvalues: INT (Problem Solving Competencies)		
Value Dimension	World	Self
Intrinsic: human	People Skills	Stability/Resilience
Extrinsic: practical	Solution-oriented Attitude	Responsibility/Assertiveness
Systemic: formal	Structural Problem Solving	Decisiveness

The capabilities as well as the respective attentiveness of all 12 competencies are also displayed in a spider diagram clockwise as shown below:

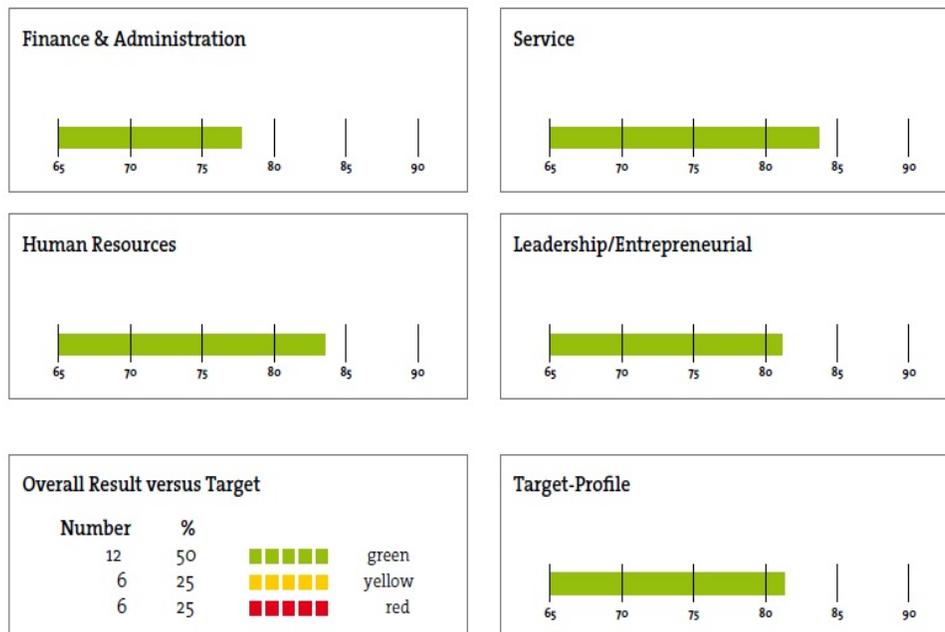


The outer round curve which connects the individual squares symbolizes a candidate's abilities and depicts a sort of talent map. The curve connecting the diamonds gives an impression of the candidate's current situation, i.e. the attentiveness or concentration regarding his/her abilities. One can see where the *wings of attention* lie or where one shuts oneself away. Business coaches like to work especially with this part of the report. It can also help to find the genius within oneself as Jay Niblick showed in the context of peak performance (Niblick, 2009, 28 f).

In order to support the HVP expert, additional data is provided, as shown in the image below:



The last page of the report concentrates on job matches. A candidate's results are matched against 10 standard profiles and can also be matched against a specific target profile, (usually determined by the PAT) as required by the customer.



Beyond the above projections the standard job profiles cover further basic functional areas within the corporate environment: Research/Development/Conceptual Design, Sales, Production/ Procurement/Logistics, Order/Project Management, Quality Management, and Marketing/Product Management. Hence, a client can always see in which functions an assignment is generally promising or should be avoided. For specific recommendations, the PAT is used.

Apart from the intention of the V12C to help companies optimize recruiting and HR development, the report aims to fulfill three major goals for the participants who receive the report:

- The candidate/associate should receive a fair judgment of his/her personality.
- Analysis and format should give a new perception on one's personality, especially aspects of *ability* and *willingness to use them*.
- The candidate/associate should be encouraged to reflect results and conclusions/ implications in-depth.

2. Introducing the Position Analysis Tool (PAT)

As Kevin Wolfe stated, selecting the right people is fundamental to organizational success (Wolfe, 2009, 8). The PAT is used to tailor the profiling tool to meet specific job

requirements and the tasks associated with them. The trend clearly goes from standard requirements to specific job profiles because it is becoming more and more apparent that a company’s market environment, its structures, process maturity, and culture influences the skills it requires to remain competitive. For example, the supply chain manager in the highly specialized automotive industry probably needs higher process understanding than his counterpart in a mid-sized construction company focusing on regional markets. And the service manager of a small high-tech medical company cannot be compared to a service manager of a blue chip cell phone manufacturer. While in the first job, the main focus lies on steering a small team of technicians in order to maintain hundreds of machines all over the globe, the job of the second service manager is to optimize service processes on an international scale. In short, the labeling might be the same, but the jobs and their associated skills are different. This also applies to the so-called “soft skills” which are – as Robert S. Hartman has proven – the capabilities of an individual to value.

The PAT is an online questionnaire composed of 120 statements describing a job or functional role as pictured below. First time users need about 20 to 30 minutes to complete the PAT; with practice, only about 10 minutes are required.

Within each block, you will find three statements. All statements need to be evaluated with regards to your specific job description. Please rate the statements on a scale from 1 to 6.

1 means not important or not applicable, 6 means very important or fully applicable. Please note: it is not allowed to distribute equal scores within one block.

POSITIONAL ANALYSIS TOOL FOR PROFILING VALUES®

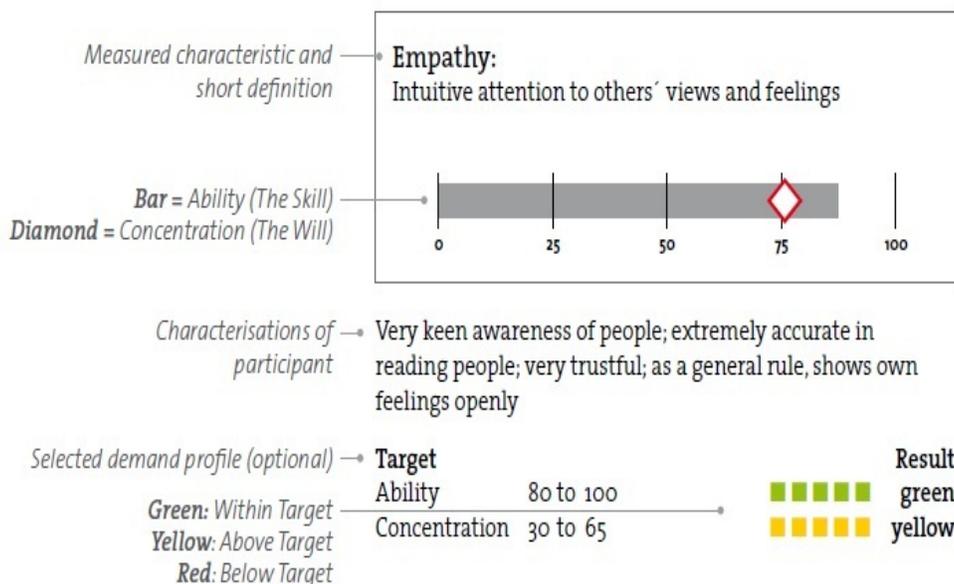
	1	2	3	4	5	6
It is important to be able to assess people	0	0	0	0	0	0
Solving people problems cooperately is mandatory	0	0	0	0	0	0
The candidate should enjoy being decisive	0	0	0	0	0	0

	1	2	3	4	5	6
The candidate should enjoy approaching others easily and fast	0	0	0	0	0	0
Stamina is very important	0	0	0	0	0	0
Far-reaching decisions should be made after thorough analysis	0	0	0	0	0	0

The statements are grouped into 40 blocks with 3 sentences each. The system does not allow two or more statements within one block to be given the same score. This leads to a

forced distribution of preferences. The combination of ipsative and Likert psychological methods prevents clients from raising high demands on all scales. Employers tend to exaggerate requirements and end up finding no-one who can meet them. And even if they find a suitable candidate, he/she would probably be bored with such a job. The questionnaire can also be used to discuss requirements in a systematic way together with the client. Experience shows that many clients appreciate such a profound approach.

The 120 statements correlate with the 24 scales of the V12C, all DIM/VDIM and INT/VINT scales of the HVP. Thus, there are 5 statements in the PAT for every bar and every diamond in the V12C report. The next image shows how the PAT's results are translated for each competence scale using a simple dashboard of traffic-lights: green, yellow, and red.



The PAT provides target scores for every bar and every diamond as shown in the image above. The target is displayed as a range of percentage scores. The ranges are calculated automatically by the system but can be fine-tuned manually if required.

3. Matching V12C and PAT

Generally speaking, each profiling can be matched against every PAT to determine the fit between candidates and jobs. In normal recruiting situations, however, a PAT is usually matched against a smaller group of candidates to determine the most suitable applicant. Large scale matchings can be useful, on the other hand, when clients have several vacant

positions. It has also been used for companies in turnaround situations that need to re-skill and redeploy larger groups of employees.

Interpreting profilings is a skill that requires comprehensive experience, training and monitoring. The solid projection from a profiling to the requirements of a specific job not only takes sound diagnostic knowledge, in addition the client usually wants to understand how and why certain conclusions are drawn. This is where the PAT comes into play. The results of the match between profiling and PAT are shown in a traffic light mode: Green lights symbolize strengths; yellow lights need to be carefully monitored. And red lights are “construction sites” where one has to stop and profoundly examine the situation. The traffic lights thus help the HR consultant by flashing important aspects that need to be considered during interpretation. At the same time, the traffic lights help the client to better comprehend the outcome of the matching.

One of the most powerful features of the HVP lies in its ability to make the current situation of the individual visible and simultaneously show the general disposition of this person. For example, the attitude index of the world view might be currently low, because the candidate is heavily burdened by an overload of tasks. Or the attentiveness on Goal Orientation (self-direction, systemic self, VDIMS2) might be low, because the person has currently lost the deeper sense of his/her function with respect to projection of a longer self-strategic goal. As HR consultants, we do not have a *crystal ball* that can tell the client how a candidate will perform in the new role. We only have the *flashlight* of the current situation. Obviously, most applicants or candidates are not fully satisfied with their current situation. That is quite often their main reason to aspire a change. However, also the opposite may be true: if profilings show very high diamond scores on Success and Goal Orientation (VDIME2, VDIMS2), this points out high satisfaction in the current function. The willingness to change should at least be challenged in an interview. HR consultants can tell many stories about good candidates who only seek a job offer to negotiate a higher salary with their current employer. Hence, the results of the matching cannot be analyzed without taking the specific context into account. The tool points out critical issues which then require further investigation.

Let us take a view of some examples. A manufacturing company for the IT-industry wanted to fill the position of a team leader sales and service support for its EMEA center. A PAT has been conducted and matched against 10 applicants who had gone through initial screening and a telephone interview. The profiling brought up some interesting results.

One candidate with excellent functional skills showed an extreme score on the diamond of Personal Needs, namely 85% (VDIMI2). The other bars and diamonds were quite good with respect to the job profile. Thus, the overall assessment resulted in *Good Qualifications*. The HR consultant recommended the candidate for a personal interview. However, he advised the client to focus on possible egocentric or even

narcissistic tendencies. The client took the advice and decided to reject the candidate after the interview. The candidate would have been too confident for this role and the whole team.

Another candidate who had performed well in the telephone interview was matched against the position profile. The matching detected an important deficit and the candidate was marked as having *Limited Qualifications*. The main reason was a very low score on Empathy (bar 33%, diamond 5%). No further recommendation was necessary.

A third candidate also had a *red traffic light* on attentiveness of Success Orientation (VDIME2). The diamond was too low according to the job profile. However, after nearly one year of unemployment such a score is not unusual. The interview suggested indeed that the low score was a temporary phenomenon. In the end, she got the job.

In a second example, a professional services engineering company for high-tech products asked profiling values to assess the only candidate left before the final interview. The team leader would be responsible for about 2 million Euro in consulting fees per year and more than 20 highly specialized engineers. The candidate was unhappy in his current position and therefore readily available when a headhunter approached him. The V12C detected a low diamond on Goal Orientation (VDIMS2) in the profile of this highly talented and creative person. The HR consultant recommended focusing on the fit between candidate and challenge in the final interview. The consultant's suspicion was that the candidate would take the next best offer due to his current dissatisfaction without having examined and thoroughly thought about whether this position is really suitable to his mid and long term goals. An in-depth discussion followed the final interview. The candidate took two weeks to really think about the job offer and finally concluded that the position would suit his personal career strategy. Client and candidate were thankful being activated to discuss this important topic. In this case, one of the key questions of Robert S. Hartman was applicable: *What am I here for in the world?* (Hartman, 1994, 123).

A third example covers the area of HR development. A globally operating welding group had restructured its sales activities in the German speaking countries in 6 regional sales offices, each led by a manager. The sales director requested profilings and assessments of his regional sales managers, i.e., profiling-based interviews conducted by a consultant. One of the associates showed very low scores on world view, especially Empathy and Structured Thinking (DIMI1, DIMS1). The corresponding diamonds were also extremely low (VDIMI1, VDIMS1). Negative and very critical thinking was also detected in the AI1 score. The highest score – bar and diamond – was on Personal Needs (DIMI2/VDIMI2). Thus, self-reflection of this manager was definitely not one of his strengths. Matching the manager's profile with the PAT showed that he was *Not Recommended* for this job. It turned out that he had been working in the back office until recently and was then appointed to build up one

of the poorly developed sales regions. Moreover, this has been a decision of disconcertedness. The clear recommendation was to replace this manager.

The project revealed two other findings: The sales director had already secretly chosen one of the six managers as his successor. The profilings confirmed his choice. It became also apparent that a second manager's talents and motivation enabled him to succeed the current sales director. This alternative candidate provided more security for the overall HR development plans of the department. At the same time, a competitive element was introduced. As a side effect, individual development plans for all managers improved and investments, such as training, could be allocated much better.

4. Comparing HVP and V12C

The V12C has been on the market since spring 2009. From the start, *profilingvalues* wanted to make sure that its application of the HVP was in line with the original test developed by Hartman. The method of comparison that was chosen is actually quite simple. All profiling participants rank the 2 sets of statements - World and Self View - twice:

Hartman's original statements and
profilingvalues' statements, which are more job related.

The correlation between the 2 sets of statements has been studied in-depth for almost 2 years. The population used for the cross-validation study totals 1,250 participants (as of November 2010). The sample comprises professionals and managers from Germany, Austria, and Switzerland. The most important results – as illustrated in the picture below – are:

the mean of standard deviations is only .3 different.

Spearman's Rho, a statistical correlation coefficient, scores even slightly higher than the HVP items.

Kendall's W which measures the concordance of the testees is very good as well as the direct similarity between V12C and HVP items.

Business World: n = 1250	Standard- Deviation V12C	Standard- Deviation HVP	Spearman's Rho	Kendall's W	Spearman's Rho V12C/HVP
A fascinating product	2,4	2,1			
An innovation	2,3	1,7			
Gains by chance	2,6	2,9			
Being blamed by a supervisor	2,4	1,9			
A useless product	2,2	1,7			
The creative head of a company	2,1	1,9			
Instant dismissal of a family father without cause	2,0	1,3			
Mass unemployment	2,2	1,3			
Production stop	2,2	1,9			
Recognition of individual performance	2,4	2,9			
Success based on excellent personal performance	2,4	2,2			
Workplace bullying or harassment at work	2,1	1,2			
Finding personal fulfilment at work	2,7	1,9			
A colleague who does not like to adhere to rules	2,4	2,7			
Automated business processes	2,4	2,2			
Exploitation of labor by going below minimum wages	1,8	1,4			
An ingenious entrepreneur	2,5	2,0			
The power of brands	3,0	2,4			
Average	2,3	2,0			
V12C			0,967	0,79	
Hartman Value Profile			0,926	0,84	
V12C/HVP					0,955

Conclusion

Introducing a HVP-based business application in Europe turned out to be very rewarding and successful. In comparison to other psychometric methodologies and profiling services, several aspects are viewed as beneficial by clients:

Understanding the value system of a person, i.e., measuring a candidate's capability and affinity to value, provides enhanced results compared to methods that only identify behavior or attitudes.

Not being able to manipulate the results is a strong argument for clients.

Time is a very decisive factor; being able to complete the test in only about 20 minutes is a big advantage.

The simultaneous view on abilities (bars) and attention (diamonds) enables the client to go much deeper into current attitudes and motivational structures; the combination of personality traits and current situation allows also several runs, e.g. for yearly appraisals.

The Position Analysis Tool (PAT), complements the V12C very well by customizing the profiling for usage in highly diverse situations. The following points can be extracted as major assets and arguments:

- The online questionnaire is easy to handle and quickly conducted (about 20 minutes). The PAT can be used as systematic anchor for position analysis, also together with the client.
- The method avoids exaggerated requirements by forcing preferences.
- The match with the profiling of the individual delivers an overall result ranging from *Not Recommended* to *Outstanding Qualifications*.
- The dashboard system (green, yellow and red) identifies easily strengths, weaknesses, or other concerns, e.g., when a person is unchallenged; thus, the analysis and discussion of decisive aspects is more effective and focused.
- The match of profiling and PAT needs to take into account the current situation and should be projected with content analysis on future situations; however, this will always be the case, except when crystal balls become validated.

The PAT and the V12C help organizations and individuals to find out which tasks and challenges suit a person best. Therefore, they are a very small, nevertheless helpful, contribution to bring more *Good* into the world. Further feedback or discussion notes from the readers are very welcome. For more information, including details on the correlation study, please email: ulrich.vogel@profilingvalues.com.

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AN AXIOLOGICAL MEANING OF “THE SELF”

Wayne Carpenter

WAYNE CARPENTER is a practicing axiologist with over 30 years experience researching and building applications based on the axiological discoveries of Dr. Robert S. Hartman. He has developed interpretation and measurement systems, training and development systems, training seminars, computerized report and delivery systems, and hundreds of products and services for individual and personal use. He has trained consultant and consultant leaders as well as corporate, executive, and support personnel. Wayne’s products, services, and applications have been utilized by major corporations on a world-wide basis. He continues to research and develop new applications and models. His ultimate goal is to validate the scientific basis of Dr. Hartman’s axiology and to document the value of axiology both at the corporate and personal levels. His e-mail address is: wayneaxio@hotmail.com.

Abstract

I believe that it is significant that in the description of Moses’ encounter with the burning bush God reveals himself to Moses as “I Am.” There is a totality and completeness about the statement, “I Am,” which sums up the totality of our existence. Accounting for the experience that can explain our awareness of consciousness is a daunting task. The challenge has been attempted by philosophers and scientists. The purpose of this paper is to explore and to gain a more precise and clear definition of “self awareness.”

Introduction

How do I know my “Self”, that “I am”? One answer to this question is, “I am alive.” I am breathing, my synapses are firing, the blood is flowing throughout my veins and arteries, my hair is growing and falling out, and my digestive system is working. My brain is processing and analyzing data, generating decisions, organizing and categorizing my thoughts, generating sometimes creative ideas, sometimes not, producing illusions, imaginations, and fantasies. If I could know everything that there is to know about these physical processes, would I have a complete knowledge of myself and understand how and why I exist as I do?

Will there be a time in the future when a type of integrated holographic analysis of the physical and mental processes will precisely measure every aspect of what it means to be the “I” of “I am”? Certainly, neurophysiologists and their new machines are making correlations that are giving us more precise, intricate, and minute evaluations. Can we envision a physio-mental genome that maps the physical and mental processes into an all encompassing model?

If there were such a mapping, would we have the necessary and sufficient understanding to explain and comprehend what it means to be “I am”?

It seems to me that any physical-mental analysis requires a moment of existing, a time of decision that occurs and produces these physical and mental effects. Will cataloging and analyzing these effects and processes provide an adequate basis for defining and measuring the meaning of the “I” who is experiencing life via these processes?

Reflecting on “I am” generates the expression “I am I”. In this case I am the object of my reflection. I have a relationship with myself. I experience I, reflect on I, and reflect on both the experience of I and the reflections about I. I understand “My Self” as the expression “I am I”.

Does the “Self” of “My Self” come into existence in a vacuum? Obviously not. I am born into a society, a grouping of other like selves who provide a means of gaining an understanding about who I am, where I am with respect to other selves and the world in general, and how to function as a self in the world. What place does the interaction with others play in the creation of my knowledge and understanding of my self? Can there be self reflection without self interaction? How much of our understanding of self-meaning is dependent on interaction? Is the “I” of “I am I” the same as the “I” of “I-Thou”?

We know that there are cultural or societal beliefs, values, and techniques that are unique and that become key factors in generating self knowledge. How much of our identity is controlled and defined by these cultural processes and meanings? Is there an element of self-meaning that is unique and separate from other selves, but at the same time common to the knowing process? How do we document the common physical and mental processes that define us as members of a society of selves? Is there something unique about the self knowing process that binds us to all living creatures? How are we uniquely different from other non-human creatures? If there are differences, how do we define, measure, and document those differences? If there are differences, how do we know that one self, the self we express as humans, is more valuable than the self of other living creatures? These are a few of the questions that become subsidiary or “follow-through” questions for unpacking the expression “I am.”

There are at least three distinct methodologies for investigating these questions. One is the philosophical approach, another is the scientific approach. There is a long history of debate about the philosophical implications of the self. Scientifically, these issues were traditionally handled by physiological analysis, focusing on the brain and how it functions, or by morphological analysis, focusing on how the mind functions, or by behavioral analysis.

Through Robert S. Hartman’s research and development, there is a new approach to understanding the self, *axiological analysis*. The focus of my paper is to demonstrate how axiological analysis of the concept self provides a more thorough, objective, and functional understanding of the issues, and how an axiological examination of the self provides a clarification and justification for the scientific application of axiology. I am convinced that the evidence substantiates the claim that Dr. Hartman’s axiology provides a platform for defining and measuring the concept of self with a precision, that has up to now been impossible to achieve.

1. The Hartman Model

According to Hartman’s system for understanding “value,” value is a phenomenon of concepts. According to his system, the value of anything is determined by the extent to which it meets or fulfills the intension of its meaning. For example, a chair that has all of the natural and desirable properties contained within the concept of “chair” is by definition a

"good chair." A chair that has only a few of these properties is by definition a "less than good" or "not as good" chair, a "fair" chair, a "poor" chair, etc.

A "good chair," according to Hartman, fulfills the intention of its concept. Given that premise, Hartman's theories use a system of mathematics to establish and prove the accuracy and utility of his theories.

Hartman discovered that every concept has three dimensions. Every concept has the following types of value:

The value of its uniqueness,

The value of its function or role, and

The value of its meaning and purpose.

These three "Dimensions of Value" are referred to as the following concepts:

Intrinsic Value Dimension

Extrinsic Value Dimension

Systemic Value Dimension

The Hartman Value Profile (HVP) objectively measures the relative clarity and level of development of each of these value dimensions. It measures the structure and dynamics of a person's value system relative to each unique concept being measured.

In addition to measuring value and personal value systems, the HVP measures a person's value judgements—their valuations. According to Hartman, making judgements about any conceptual phenomena involves judgments in terms of value combinations within and between dimensional sets.

For example, there are three Value Dimensions: Intrinsic, Extrinsic, and Systemic. Any two items from these three Value Dimensions can be combined in eighteen (18) different ways when making value judgments.

Consider the concept "Wife." The intrinsic value of a wife is her value as a unique, one of a kind, authentically original, individual. A wife has value because she is unique. This uniqueness constitutes her Intrinsic value.

However, what happens when we make value judgments about a wife? What are our options? The intrinsic value is: the uniqueness of this wife. When making a judgment about her uniqueness, I can:

Value the Intrinsic Value intrinsically = I love my wife's uniqueness.

Value the Intrinsic Value extrinsically = I enjoy my wife's uniqueness.

Value the Intrinsic Value systemically = I find my wife's uniqueness meaningful.

Disvalues the Intrinsic Value intrinsically = I hate my wife's uniqueness.

Disvalues the Intrinsic value extrinsically = I dislike my wife's uniqueness.

Disvalues the Intrinsic Value systemically = I think my wife's uniqueness is crazy.

The most proper or basic Value Dimension of the wife that I am making value judgments about is her *intrinsic value*. There are at least 6 different value judgments or evaluations I can make about her intrinsic value. I can make the same six judgments for extrinsic and systemic dimensions of value. Using intrinsic, extrinsic, and systemic judgment combinations, there are eighteen different evaluations about the concept of wife that can be made.

The fascinating discovery that Hartman made was that the 18 Evaluational possibilities are not made randomly because their relative or relational value is not relative in nature. The relative value of each judgment is built into the structure and dynamics of the conceptual system that generates decisions.

Hartman discovered that the relative value of each one of the 18 Evaluational possibilities is different, and that the hierarchical arrangement of their relative value is constant across concepts. He demonstrated that the relative value of the intrinsic valuation of the Intrinsic Value is more valuable than any one of the other 17 Evaluational possibilities, and the intrinsic disvaluation of the Intrinsic Value is less valuable than any one of the other 17 Evaluational possibilities. He discovered that regardless of whether one uses symbolic logic, the theory of types, set theory, or transfinite set theory, any quantification of the 18 Evaluational possibilities will always arrange the items in a precise hierarchical order.

Hartman discovered that there is a value norm in the natural universe, in the phenomenal world of concepts. This value norm enables us objectively to measure and study the unique characteristics of the structure and dynamics of any person's value and valuations concerning any conceptual phenomena.

2. Thinking and Valuing

One of Hartman's most important discoveries is that we are all uniquely different, but we think with the same overall structure. This structure governs our ability to recognize problems, to create ways to solve problems, and to create decisions. Each of us is a unique application of this thinking structure, but we all can take comfort in the fact that we ask common questions, have common problems, have similar difficulties, and develop similar feelings when we succeed and when we fail.

Our thinking is organized into habits and patterns. Our actions reflect our habits, not our habits our actions. When we find out what produces and stands behind our thinking habits, then we can understand why we act as we do. If we want to change our actions, we must first learn to understand our habits (the way we typically think) and then change those habits and patterns. We can better understand how to change those habits by understanding how our minds work, how the decision process works.

The functions of the mind are to create meaning and understanding and to produce decisions. From the moment that we are alive, our bodies produce decisions at every micro level as well as at every macro level. The moment that our cells begin to form, the total structure of the decision process that generates our personality is busy making life-making decisions. These life-making decisions, micro decisions, are just as important and natural to our eventual lives as macro decisions like the decision to start a career, to stand up for what we believe, and to take care of our loved ones.

Value analysis provides a view of the decision making process that is going on inside us on a day to day basis. This process collects data from the world both outside and inside us, turns that data into perceptions like, "I feel good about myself," and unites these perceptions into concepts, ideas, beliefs, and attitudes. Our valuations like, "I am a good

person" translates these ideas into decisions like, "I am worthy of being loved" and integrates these decisions into actions such as, "Yes, I will marry you because I love you and you love me."

Our talent for making value judgements and decisions measures how we filter out some things and focus on others. From the first time our bodies begin to collect data, the filtering process is going on. The amazing part of the filtering process is that each one of us filters in a different or unique way but by the same overall process. Axiology documents the overall filtering process and helps us identify the unique way we interpret data. Moreover, axiology helps us understand how the filtering continues from collecting the data to actual decisions and actions.

Through the HVP, axiology measures a person's capacity to value. The capacity to value is a talent or ability by which individuals organize their intellectual and emotional capabilities. Value talent incorporates three basic activities:

The ability to perceive or see oneself and the world,

The ability to generate a concept or idea that represents what one sees, and

The ability to apply the concept or idea to what one sees by making a value judgement, that is, by making a decision.

Each stage of this is a filtering process determined by the axiological structure of the person making the value judgements. Axiology provides us with the ability to mirror this decision structure, to identify the influence of the filtering process at each stage, and to provide a clear understanding to persons about why and how they make decisions.

I believe that this three stage representation of the value process has additional powers as a tool for understanding the dynamics of the meta-structure of concept formation, and as a tool for explaining the logical structure of the mind or brain as a meaning generator. Moreover, I am convinced that by approaching the subject of consciousness via an axiological structure, we can avoid the pitfalls of trying to account for the relation between thought and action and the relationship between physical processes of the brain and the act of consciousness itself.

Interpreting concept formation within the boundaries of decision-making opens the door to the definitions of "thinking" and "valuing" as decision fields that progress from perception to action. Consider the following analysis:

"Perception" is defined as "the interpretive field or integrative network." Data are accumulated and prioritized. Axiological filtering is occurring at this level based on the axiological structure of the person making value judgments and on the criteria that define the environment in which the data is accumulated.

Perceptions are organized into unified experiences that then generate concepts. I refer to this unification of experience as the Integrated Network. Concepts result from additional filtering occurring both internally, based on the axiological structure of the person making the judgments, and externally, based on the interaction of persons with conditions in the decision environment.

Concepts are then integrated into the overall process of relating decisions to the environment. I refer to this process as the Interactive Network. At this point, filtering is

occurring from other perceptions, concepts, and criteria that enhance the process of interpretation.

The Interactive Network leads to a decision in the Active Network. The filtering process has accomplished the job of producing a response to stimuli that is consistent with criteria that define the environment and that define the person making the decision.

Decisions are integrated into the Socialized Network of actions.

The key question for Perception is, "What is important?" Importance is derived from multiple sources including the physical chemistry of the brain, the functional elements of the cognitive experience, and the environmental conditions in which the decision is occurring. Axiology provides insight into the way individuals organize these influences to interpret their data.

The key question for "Conception" is, "What does it mean?" The influences at this point incorporate the past, present, and future into a unified moment reflecting both the potential direction of the future, the future as present, and the influences of the past as present. I am convinced that at the moment when the unified field generates concepts, the mind is in touch with both the past and the present, and experiences are occurring at a level that operates as a process.

The key question for the interpretation or decision phase is, "What is the effect or result?" Axiological filtering is still operating, molding and shaping the direction of the decision as it is socialized into an action.

The advantages of interpreting the meaning-generating function of the mind or brain axiologically are that we can measure the filtering process operating at the perceptual, conceptual, and decision levels; and we can translate the environmental factors into axiological definitions that can in turn be measured and integrated with the decision network of each individual or with groups of individuals. As a result, we can speak precisely of how individuals will react to environments, and of the trends that reflect the tensions and stresses of differing types of individuals in groups.

Obviously, there is power in measuring this filtering process in decision making. As Dr. Hartman was fond of pointing out, "The proof of the pudding is in the eating." Over the years of applying the filtering principles, the evidence has continuously supported the accuracy of the axiological models from a formal statistical examination of the profile gathering instrument, the axiological rating system, and the interpretative system. More support comes from examining and documenting patterns measured that were enhancing or interfering with decisions at individual and group levels, from personal experiences of individuals receiving feedback, and from individuals responding to feedback from others.

3. The Axiological Self

The question now is, how does measuring the decision process aid in understanding the self? First, consider what we are measuring as value talent. There are three general types of value talent. First, there is talent rooted in what you see clearly. For example, the more clearly you can make distinctions between people who will treat you well and people who will try to control you, the better you can make judgements about how much of yourself to put at risk

in a relationship. "Clarity" is a measure of your ability to see and be sensitive to the features and factors in yourself or in your environment.

Clarity alone, however, does not measure all of your talent and does not guarantee that you will be able to make the right decisions consistently. The second type of talent is rooted in what you pay attention to. Some individuals are extremely focused on things and can easily see flaws in things. Other people are sensitive to the feelings of others and know before seeing someone whether there is a problem. Others are able to read documents, evaluate plans, and immediately see crucial issues and flaws in logic. Each person has value talent based on what their mind filters and focuses on when making decisions.

The third type of talent rests in the balance that exists among all of the particular talents and abilities to see and make decisions. For some individuals, this balance exists because there is a level of acceptance of things, a belief that what you see is real. For these individuals, success is the integration of their abilities and talents; and not necessarily one specific talent stands out. Development for them is finding a place in life where their "balance pattern" allows them to perform and be comfortable.

For others, balance exists because these individuals put out efforts to organize and use their thinking talents. Some individuals do not have a sense of balance, and their value talent rests in the fact that they are so focused on one particular aspect of their life that they become "experts" in that particular area. For these individuals, success becomes the specific application of their talents, and development becomes the integration of their talents into their overall lives.

Balance is the integration factor that shows how well we are merging our various talents into the total person we are. When our lives are "out of balance," we either spend energy to bring in a sense of integration and balance, or else we live "out of balance." In either case, we must expend energy that can reduce our freedom of access to natural talents, and this can leave the effects of the stress and strain.

Value talent may lie in all three of these general areas, or it may lie in one particular area, such as focusing on what is immediately happening around you. The blending together of value talents makes our world interesting and gives each one of us special gifts.

Now we will recap what we know. Hartman discovered that there are three basic dimensions of value that organize the way we think and make decisions:

- The intrinsic value dimension,
- The extrinsic value dimension, and
- The systemic value dimension.

To make things easier, we will refer to the intrinsic value dimension as "I," the extrinsic value dimension as "E," and the systemic value dimension as "S".

The I dimension measures personal and spiritual values and identifies what makes anything unique and irreplaceable. The E dimension measures things and groups of things, and it identifies the practical value or use of a thing. The S dimension measures systems, beliefs, and ideas, and it identifies the order, structure, or "blueprint" of a thing. The S dimension measures what ought to be. The E dimension measures what is. The I dimension measures the uniqueness of what is. Each idea we think of and every decision we make is organized by its meaning (S), its use (E), and its uniqueness (I).

The Dimension of Uniqueness (Intrinsic Value)

This is the value of uniqueness and individuality, the value of being irreplaceable, of being one of a kind. It is best defined in the expression, “When it is lost, all is lost.” It is personal (the value of being a person) or spiritual value. It is the value that is not generalized from membership in a class or as a definition that prescribes what the value should be. It is the value of being unique, such that any part of the experience of the value involves the value of the whole. It is the value of being my wife, my son, my employees.

The Dimension of Function (Extrinsic Value)

This is practical or descriptive value, the value of things, of events and situations. It is comparative value relating one thing to others and deciding what is good, better, or best. It is the value of belonging to a group or a class, creating functional value and class membership such as being a wife, an employee, a corporate officer, a janitor, or an artist. It is the value of properties that can be counted one by one and infinitely compared to one another.

The Dimension of Structure (Systemic Value)

This is the value of meaning, ideas, and systems. It is conceptual or theoretical value, the value of logic, order, consistency, and conformity. It is best defined by the expression, “You either have value or you do not.” It is the value of perfection, indicating a limited or finite number of properties. It is the value of a construct or construction that only has the value of the meaning of its definition; for example, a geometric figure like a circle cannot be a good or bad circle because it is either a circle or is not a circle. This is the value of the *concepts* of “wife,” “employee,” or “officer” in a company.

Hartman discovered that the structure of the way we think is mirrored in each value judgement we make and is unique to each one of us. He also discovered that the value dimensions differ in overall worth and can be organized into a system of value that defines what is most valuable to what is least valuable. As a result, we can use the norm of valuing and thinking to define our value talent in terms of how well we can think about “I,” “E,” and “S,” how much attention we pay to each of them, and how balanced our thinking is about “I,” “E,” and “S.”

The three dimensions of value are tools that provide greater understanding of ourselves and the world around us. This combination of our evaluations of self and of world provides two unique perspectives. Utilizing these perspectives, we are able to identify the strong biases in our thinking that mold our decisions. Moreover, we are able to identify our strengths, the thinking that is clear and can be relied on, and our blocks, the thinking that can interfere with access to our natural talents. By adding the three dimensions of value, a powerful conceptual tool results that has a multitude of diagnostic and therapeutic functions. We call this tool, “Two Worlds In Three Dimensions.” The “Outer World” is our perspective on what is happening around us, including how clearly we see, what we pay attention to, and the balance in our thinking. The “Inner World” is our ability to see ourselves in three dimensions: our uniqueness and inner worth, our functional worth, and our sense of meaning and purpose.

4. Two Worlds In Three Dimensions

Outer World

Intrinsic Dimension:

Persons as unique individuals,
spiritual, irreplaceable others,
the value of a "thing" as it exists in itself

Extrinsic Practical Dimension:

Material values, things, classes,
groups of things,
things as they serve useful roles or have
functional value,
comparison of things, people, or situations,
concrete functional value in general,
practical concrete thinking and organization

Systemic, Theoretical Dimension

Analytical or structured thinking,
structure, order, or consistency in thinking,
theoretical or conceptual organization and
planning,
valuing concepts of what "ought to be,"
ideal self image

Inner World-Self

Intrinsic Self Dimension:

Self as infinitely valuable,
the unique worth of each person,
the value of "who" one is

Extrinsic Self Dimension:

"What" one is,
the role function one plays,
the sense of using time in a useful func-
tional way,
satisfaction or dissatisfaction with what one
is doing in the world

Systemic Self Dimension

"Where" one is going or "ought" to be
going,
structure, order, or consistency in self-
direction,
persistence,
drive motivated from inner principles and
goals,
self concept

These three value dimensions translate into value capacities that can be measured using the Hartman Value Profile. With respect to understanding the self, the following capacities can be measured:

Self Esteem

The abilities to see and appreciate one's inner worth, individuality, to be authentic, honest, and sincere, and to see and accept one's strengths and limitations.

Role Awareness

The abilities to see and appreciate one's place in society, to feel that one is contributing, to feel confident that one can perform or is performing, to feel satisfaction in what one is doing.

Self Direction

The abilities to see and appreciate inner ideals and oughts, to feel a sense of duty, loyalty, and commitment to what one believes is right, to be self-directed and persistent.

Following the application of what we can measure about these self capacities, we can measure the *clarity of one's self concept*, what one is paying attention to about the self, and the balance among the value dimensions of self and world.

The following examples view three self dimensions from the standpoint of the *clarity and accuracy of the dimensions*.

Self Esteem, Clarity/Clear

These individuals:

have an excellent capacity for self-awareness, for seeing and appreciating their abilities and limitations without preconceived ideas. They will likely:
 be very sensitive to personal individuality and uniqueness,
 be in touch with personal likes and dislikes, identifying with their inner self worth,
 be authentic, genuine, honest with themselves about themselves,
 understand their strengths and limitations;
 accept their inner worth apart from expectations that others may impose, or from ideal self images and expectations,
 accept responsibility for self, and
 have a depth of inner life, an intensity of identification with self, that can serve as a gyroscope to themselves in difficult times.

Self Esteem, Clarity/Poor

These individuals:

have a vague sense of their inner self worth which limits their ability to know who they are or what they can accomplish; and as a result they:
 will not have a strong sense of self identity, self esteem, self respect,
 are highly susceptible to preconceptions about themselves imposed by expectations from others or from ideal self images and expectations,
 lack a sense of genuineness, authenticity, and sincerity,
 lack inner depth, an inner source of realistic confidence and self security, and
 will not have a strong sense of self identity, self esteem, self respect.

Role Awareness, Clarity/Clear

These individuals:

have an excellent capacity for seeing and appreciating their place and function in the world, as well as an excellent ability for clearly identifying social and role norms, functions, and expectations. As a result, they have the ability to:
 feel competent and confident about what they are doing,
 feel satisfied with their performance,
 realistically and correctly identify positive options in their current environment,
 develop an internal time awareness that can build a sense of continuity and constancy in their lives,
 identify and appreciate the value of their social image and accomplishments,
 know what is required of them to feel comfortable and confident about what they are doing,

see and understand the options for development in their current circumstances, develop a very good internal time awareness, and understand the value of social image, status and social and role accomplishments.

Role Awareness, Clarity/Poor

These people:

have a highly restricted capacity for seeing and appreciating their place and function in the world,
have difficulty understanding the importance of social/role functions, norms, and expectations,
cannot understand how to develop their performance to attain a sense of competence and satisfaction with what they are doing,
cannot realistically identify options for development in their present circumstances, and will not realistically understand the value of status and recognition.

Self Direction, Clarity/Clear

These individuals:

have an excellent capacity for seeing and appreciating self order and self direction,
have a keen perception of inner ideals and self-oughts that guide conduct and give them a clear and strong sense of self meaning,
have the capacity for a strong sense of duty, loyalty, and commitment to inner ideals and a strong sense of mission and purpose,
have an excellent awareness of their self definition that provides a sense of continuity, constancy, and consistency, and
have an excellent understanding of and capacity for building a self structure, an inner frame of reference, an ideal pattern that can serve as a guide to their decisions and actions.

Self Direction, Clarity/Attention Level Four—Inattentive Transition Clarity

These individuals:

have only a vague concept of self order, self direction, and self meaning,
do not have the ability to see guides or principles for conduct realistically,
either compulsively push toward unattainable goals or vacillate with no sense of direction,
tend to shift from blind commitment to a sense of duty and loyalty, or else have no sense of commitment at all,
have difficulty identifying consistently with a sense of mission and purpose,
will not realistically appreciate or understand the function of inner ideals, principles, and codes of conduct, and
since their code of conduct is faulty then their decisions and actions are likely to be faulty.

The following examples illustrate the three self dimensions from the perspective of individuals who either pay attention to the dimension or are not attentive to the dimension.

Self Esteem, Clear/Attentive

Their very good sense of self-esteem is interrupted by a tendency to inflate their own worth and importance, likely leading them to:
 feel that others do not give them enough credit for their accomplishments, and
 feel that they must do more than others to receive recognition for their efforts,
 become extremely sensitive about what others think or say about them or about how their appearance or actions are being perceived by others.

Self Esteem, Poor/Attentive

Their overinflated sense of self worth and self importance will cause them to:
 be out of touch with what they can realistically accomplish,
 exaggerate the significance of their contribution and needs,
 be extremely sensitive about what others think or say about them,
 become obsessed with how their physical appearance or image is being received by others,
 feel self pity, believing that they never receive the recognition and attention they deserve,
 develop a martyr complex, feeling that they must do more than others to receive the same level of recognition.

Self Esteem, Clear/Inattentive

Their excellent sense of self-esteem may be interrupted by a tendency not to give themselves as much credit as they should; and that can lead them to:
 feel a sense of doubt and question their self worth,
 rely on the expectations of others or on their own idealistic self expectations to define themselves,
 become sensitive about what others are thinking or saying about them,
 potentially be hesitant about pushing in new directions until they are certain about what is best for them,
 feel a need to achieve recognition and attention to reinforce their worth,
 speak about themselves in ways that depreciate their value, and
 have difficulty accepting praise.

Self Esteem, Poor/Inattentive

These individuals are undergoing intense self depreciation and self negating generating:
 inner self doubt, uncertainty, and insecurity,
 a tendency to feel inadequate or inferior when they do not live up to expectations,
 an extreme sensitivity about what others think or say about them,
 a dependence on others to define what is best for them,
 a lack of inner self confidence leading them to substitute social obligations and inner ideals for inner self worth,
 difficulty knowing what they can do or what will fulfill them,
 self depreciating comments and attitudes,
 a fear of success and a fear of failure,
 an inability to accept praise or handle personal criticism, and

difficulty handling confrontations.

Role Awareness, Clear/Attentive

Their focus on and attention to social image, role expectations, and accomplishments and/or status can have the following effects.

On the positive side, their confidence in their ability to perform gives them:
a sense of personal contribution, competence, and satisfaction,
a sense of comfort and belonging, and
a strong need to be recognized for their achievement and effort.

On the negative side, attention to status and social image can cause them to:
overlook their own potential for making mistakes,
become extremely sensitive about what others think or say about them, and
expect more from their social/role accomplishments than is possible,
or expect more from themselves than they can give.

Role Awareness, Poor/Attentive

Their excessive attention on social role image, status, and recognition can lead them to:
be overconfident about their ability to perform, leading them to expect more from themselves in their role than they can give,
expect more satisfaction from their social and role accomplishments than is possible,
become oversensitive to making mistakes in their role,
be highly sensitive to what others think or say about them,
tend to overlook their own mistakes, and
tend to place too much emphasis on the present.

Role Awareness, Clear/Inattentive

Although these individuals have an excellent capacity for social and role awareness, they currently feel doubts and ask questions about what social image or role is best for them. These doubts can have any of the following effects; they can:
delay decisions and actions until they are more certain about what is right,
develop anxious or restless feelings out of their frustration and dissatisfaction,
become bored as they lose interest in projects that are not fulfilling or challenging,
and lack continuity and constancy in their experiences because they have difficulty finding a sense of comfort and belonging.

Role Awareness, Poor/Inattentive

These individuals have lost their place and function in society, at least temporarily. They have lost their sense of presence in the world, and as a result they:
will depreciate not only their role but also present time,
look either to the past or to the future for confirmation of functional worth,
have a vague sense of their own responsibilities, hence, will feel no urgency to get things done,
lack confidence not only that they are contributing but also that they can contribute,

and will depreciate the potentials of their role and focus on its negative aspects.

Self Direction, Clear/Attentive

The attention they pay to the creation of inner self order and self direction has a positive and a negative element.

On the positive side, they are extremely goal directed, capable of seeing and setting goals, and drive toward them with persistence. Their commitment to inner self order builds a strong sense of self excellence, perfection, and responsibility.

On the negative side, the self perfectionism that results from their strong commitment and persistence can create:

preset ideas and expectations,
stubborn insistence on their way, regardless of circumstances, and
an ideal self image that pushes them toward goals that are impractical or goals that do not provide actual satisfaction and fulfillment.

Self Direction, Clear/Inattentive

Their attention to self direction creates the following effects. They become dogmatic and judgmental in their thinking, insisting on their own way regardless of circumstances,

feel such a compulsion to conform to their ideal self that they may live for duty, ambition, and ideal self, making it difficult to be satisfied,
become obsessed with conformity, uniformity, and sameness,
have a certain stiffness in their personality, and
have difficulty adapting to change.

Self Direction, Poor/Inattentive

These individuals are in transition with respect to their self direction. They are uncertain about their goals and do not feel a compulsion to push ahead. As a result, they will:

lack a sense of urgency to get things done,
be cautious, hesitant, and timid in their decisions,
demand less out of themselves than they are capable of giving,
question their ability to perform,
delay decisions and actions,
lack enthusiasm to take on new directions,
react with hindsight rather than foresight,
be susceptible to feelings of confusion and disorientation,
lack a strong sense of commitment, duty, perseverance, and self discipline,
have difficulty both establishing and following through with their goals resulting in:
a lack of urgency to get things done, delayed decisions and actions, difficulty knowing what to do first,
lack inner organization, resulting in confusion, disorientation, and an inability to pull themselves together to do their best, and

lack compulsion to set or follow inner standards, leading to lack of self discipline and perseverance,
lack consistency and constancy in their experiences, leading to fear and apprehension about the future,
act with hindsight, and are
susceptible to distraction.

The following examples of the relationship of Self Esteem (The Intrinsic Self) to other value dimensions will illustrate the effect of balance. Hartman taught that the interconnection of all value dimensions to each other is necessary to understand and interpret results.

Empathy Overvalued, Self Esteem Undervalued, Clear Capacity on Both

These people tend to appreciate others more than they appreciate themselves. As a result, they may:

become overly sensitive to what others think or say,
commit to meet expectations of others, even though they know that in doing so they will over extend themselves;
utilize their charm, openness, and availability to win attention, acceptance, and approval.

Empathy Overvalued, Self Esteem Undervalued, Unclear Empathy Capacity, and Unclear Self Esteem Capacity

Their oversensitivity to others, combined with their self depreciation, will cause them to:
become thin skinned, excessively oversensitive to what others think or say,
live their lives through others, defining their strengths, limitations, likes, and dislikes through others,
develop an unrealistic responsibility for meeting the expectations of others, such that denying or failing others amounts to self denial,
need constant attention and approval from others, such that they are susceptible to being taken advantage of by others, and
use openness and availability to win recognition and approval, potentially manipulating or conning others.

Empathy Undervalued, Self Esteem Undervalued, Clear Capacity in Both

They have a cautiously discrete attitude toward others that can generate an external view of others. When combined with their need for recognition and attention, this may generate:
anxiety and frustration because of their need for recognition and attention, combined with hesitancy about trusting others without reservations and stipulations,
a tendency to utilize their excellent understanding of others to persuade them to give them the attention they need,
anxiety and frustration because of their need for recognition and attention, combined with their inability to trust others without reservations and stipulations,
A tendency potentially to manipulate others in order to receive the attention they need.

Empathy Undervalued, Self Esteem Undervalued, Unclear Capacity in Both

Their suspiciously skeptical, indifferent attitude toward others will reinforce their inner apprehensiveness generating:

a disregard and disdain for others that will reinforce their inner apprehensiveness, further generating:

a surface personality without a strong capacity for giving or accepting love, frustration and potentially depressive moments because of their need for recognition combined with their incapacity for trusting others,

a capacity for manipulating others to obtain the attention they need,

a susceptibility to trust others who will misuse their need for recognition and attention, and a lack of inner resources, such that they must rely on either social recognition and/or their inner ought and ideal self image to sustain them during difficult times.

There are thousands of combinations even at the diad level, combining one dimension with the other. In fact, in my early work I developed and wrote out over 50,000 sets of descriptive statements reflecting clarity, attention, and balance among the dimensions.

These combinations form a network of information that can be used both in clinical and non-clinical settings. With a clinical pathological self, the focus is directed to what constitutes a distorted self concept. Avoiding the philosophical or psychological implications of self, axiologically speaking, self refers to the integration of percepts into a consistent self that has the capacity to reflect upon itself, to connect itself into the current experiential environment distinguishing itself from and among other “selves,” and identifies itself as unique, one of a kind nature.

In other words, a self has three basic meanings organized around its systemic nature—its definition and purpose, its extrinsic nature—its exposition or functional worth, and its intrinsic nature—its unique, irreplaceable worth.

Next, what axiologically constitutes a distorted self? A distorted self, axiologically, has a limited self concept, and is a “fractured” self that organizes percepts and concepts connected to itself in an incomplete fashion. The resulting self image is an astigmatism, organized around an incomplete synthesis of self percepts.

A series of different types of distorted selves can result from axiological astigmatism. These include:

(A) *Systemically distorted selves* that are disconnected from “now” time, with no unique identity beyond the mental constructions that define and organize percepts, resulting in fantasy oriented ideal selves that are incapable of manifesting themselves in any way other than as disconnected constructions that are real only within the boundaries of predefined mental constructs.

When this astigmatism is caused by a combination of a poor understanding of the systemic self dimension and the constant need to pay attention to this dimension, the following both positive and negative effects can occur:

On the positive side, there is an exceedingly strong sense of commitment and dedication to the fulfillment of their inner self direction. This sense of commitment can generate strong

inner goal directedness and persistence. Their total commitment to fulfilling their inner ideal self concepts creates inner perfectionism and self excellence that propels them toward their objectives.

On the negative side, their ideal self structure that serves as the source of commitment, persistence, and drive functions as the basis of unrealistic self identification, self expectation, and self direction. Their vague self concepts, combined with excessive appreciation of inner self order will generate:

rigidly dogmatic and perfectionistic self concepts that can cause them to:

develop and hold on to preconceived and preset ideas about themselves, their goals and their self direction,

become so stubborn that their persistence turns into insistence that their way is right regardless of the circumstances,

resist change,

delay decisions and actions,

develop extremely perfectionistic, black and white thinking about themselves.

They are confused between their ideal and actual selves and identify themselves with their ideal rather than their actual selves. This perfectionistic ideal self identification will likely cause them to:

feel such a strong compulsion to conform to their sense of ought that they live by their sense of duty rather than their actual selves, constantly living up to rather than just living,

try to prove themselves through ambition rather than allow achievements to grow out of self worth,

become alienated from themselves, imposing an ideal pattern on themselves that does not fit,

become trapped on idealistic tangents,

have difficulty learning from their mistakes and adapting to new situations,

become obsessed with conformity and uniformity to their ideal selves because their self meaning that comes from an exaggerated sense of ought, from adherence to an idea of perfection that constantly propels them to higher and higher goals. As a result, they:

will likely have a fear of doing nothing to the point that they find it almost impossible to delay actions,

will become ambivalent and indecisive in situations that are unstructured,

may lose their sense of drive the closer they come to the end of their projects,

may constantly move from one pursuit to another.

When this distortion is created by a poor sense of self direction and a lack of attention to the dimension, the following effects can occur.

They have a vague sense of self direction that surfaces as a native disregard for inner principles of order and structure, and as an indecisively uncertain attitude toward self direction. This combination of vague self direction and lack of urgency to push ahead can cause them to:

be unable to both establish and follow through with goals resulting in,

a lack of urgency to get things done,

delayed decisions and actions, especially those concerning self development and self improvement,
 a lack of energy for starting in new directions,
 an inability to know what to do first,
 a lack of inner organization and self structure resulting in:
 an inability to pull themselves together to do their best,
 confusion and disorientation, especially in unstructured situations,
 a passive attitude toward self development.
 They demand too little of themselves and have
 a non-conformist attitude toward inner self organization and structure leading to:
 a lack of compulsion to follow any standard,
 a skeptical and/or cynical attitude about their ability to perform up to any standard,
 a lack of self discipline, commitment, duty, and perseverance;
 a lack of consistency and constancy in their experiences that causes them to:
 see each event as an isolated experience,
 become highly susceptible to distraction,
 react with hindsight rather than foresight, and
 develop a deep apprehensiveness about the future that distorts their sense of time and timing.

(B) Extrinsically distorted selves may become so absorbed in their physical characteristics, the external extensions of their egos, that their self becomes a series of disconnected selves that must play themselves out in a series of attempts to find consistent meaning, resulting in a myopic, convoluted obsession with the body, or with an extended obsession with everything social, or with both.

C) Extrinsically distorted selves may result from an inability to see or appreciate their global self definition. These individuals, at least temporarily, have lost their place and function in society. They have lost their sense of presence in the world. As a result they: depreciate not only their role, but also present time. They look either to the past or to the future for confirmation of their functional worth,
 have a vague sense of their responsibilities, hence, feel no urgency to get things done, to do what is expected of them, and
 have no sense of identity or affinity with their roles, no sense of contribution, no sense of mission;
 do not feel that their performance is adequate; either their role is too much for them or they are bored and unchallenged;
 lack confidence not only that they are contributing, but also that they can contribute;
 have no appreciation for or satisfaction in their roles, no feeling of importance in their roles; hence, they depreciate the potential of their roles and focus on the negative aspects of their roles,
 have no sense of time, timing, or execution, no sense of belonging in the world. The disruption of their internal time structure can place them under such an obsession to fill time that either they fear doing nothing or are unable to do anything.

Their life lacks continuity and constancy, proceeding from moment to moment without interconnection. Every moment becomes the only one that is, and it is either a crisis or an ecstasy. Their lack of continuity and constancy will create a dependency, causing them to look beyond their roles for confirmation of their worth.

(D) *Intrinsically distorted selves* may revolve around an implosion of all self percepts into a unified stream of consciousness that may yield deeply mystical experiences; but these become so unique in time there is little consistency in them, no way to reconstruct or reflect on the experiences or integrate them into any activity that connects self percepts with day to day activities.

This astigmatism generates a lack of awareness of those characteristics that identify them as unique individuals. They have no sense of genuine self esteem or self respect. As a result, they will be:

closed to themselves, a mystery to themselves,

very thin skinned, unable realistically to accept personal criticism from others,

dominated by preconceptions of themselves imposed either from the outside by others, or from the inside by their own ideal self expectations.

They have little sense of genuineness, authenticity, or honesty about themselves, do not know who they are, hence, they either live by ideal representations of who they ought to be, or deny their worth altogether.

(E) *Combinations of the above astigmatism:*

A combination of *constructed self and intrinsic self* produces a self caught up in its own uniqueness with a personalization of purposes, internal ideals, and meanings. This astigmatism will be absorbed in a series of rationalizations that appear logical on the surface but that do not allow for any variance from its constructed boundaries.

A combination of *constructed self and extrinsic social self* astigmatism produces an egoistic self consumed by playing out constructed images in a physical and/or social manner. The rationalizations that can occur may result in obsessions with physical attempts to duplicate an internal sense of meaning and time. Experiences become consuming in themselves, for example: chain smoking, over eating, sex, drugs, or other attempts to identify meaning and purpose in a series of consuming physical events. Each experience becomes an attempt to find meaning in specific physical time-connected events that have no way of providing fulfillment because in their nature they are constructs.

A combination of *intrinsic and extrinsic self percepts* may result in an ego-focused, potentially narcissistic self that implodes the uniqueness of the self in terms of social, physical images that define the meaning of self within the confines of the appearances, desires, and meanings of physical experiences. These self images become all consuming and lack a sense of consistency. As a result, the synthesis of the self is consumed with disconnected but powerfully absorbing experiences, with a self that has few boundaries beyond its own physical manifestations.

Whether viewed from a clinical, pathological, or axiological developmental perspective, Hartman's system provides a rich tapestry of possible value combinations for human selves.

These value combinations reflect the interrelated nature of selves and their internal dynamics.

EXPANDED AXIOLOGICAL DIAGNOSTICS FOR THE HVP

David Mefford

DAVID MEFFORD, PhD, resides in Morristown, Tennessee and has over 40 years professional experience with the science of value, formal axiology, and its applications. The term "*formal axiology*" was coined by Edmund Husserl and developed into a formal scientific system of value and valuation by Professor Robert S. Hartman. David was Dr. Hartman's student, his assistant, and his first representative in Europe, conducting seminars using the HVP with organizations such as Siemens and Volkswagen at the Siebert Institute in Munich, Germany.

While completing his PhD degree at the University of Tennessee, David evaluated and counseled psychiatric patients with the Hartman Value Profile (HVP) under the supervision of Dr. John Wolaver, M.D. and John Marshall, M.D. for three years (see article for details). David's dissertation, *Phenomenology of Man as a Valuing Subject*, achieved a comprehensive typology of the value judgment habit patterns underlying personality structures. This axiological personality model of 26 cognitive types and 54 emotional conditioning patterns is in use for individual and group assessments by professional psychologists, sociologists, business consultants, and coaches.

David has created many different axiological assessments, including the Values Usage Exercises (VUEs) with the late Dr. Clayton Lafferty of Human Synergetics, and recently he co-created the Personal Talent Skills Inventory (PTSI), a parallel form of the Hartman Value Profile (HVP), which is currently being used for selection and coaching in 50 countries around the world.

David is Co-founder, Vice-president, and Board member of the Hartman Institute and chairman of Axces Solutions, LLC, a newly formed marketing firm, where he and his partner, Vera, direct research and development, further advancing value science through refining and validating over 50 new HVP parallel forms referred to as "*Targeted Axiological Profiles* (TAPS™)." His e-mail address is: VERAAX@aol.com.

Abstract

This discussion begins with my first clinical job using the Hartman Value Profile (HVP) under the direction of a group of psychiatrists in Knoxville, Tennessee from 1977 to 1980. Then, I show how I have partially fulfilled my vision for the developing formal axiology in elaborating multiple dimensional constructs in the hierarchy of value that underlies the Hartman Value Profile (HVP).

I explore both the BASE (value) and the EXPONENT (valuation) dimensional measurement constructs in the logical hierarchy upon which the Hartman Value Profile (HVP) is based. I review where these constructs are located in the value hierarchy and how they are grouped. I show how the BASE (*value*) and the EXPONENT (*valuation*) constructs within the value hierarchy completing the linkage of the phenomenological *cogito-cogitatum* analytic (cca), the foundation of human *conscious awareness*. Then,

I articulate the common names of the constructs and show how they are applied in practice according to data collected to date.

1. Background: My First Clinical Assignment with the HVP

A short while after being shot through the chest in a home-invasion robbery on January 8, 1980, I was very close to death and experienced intimate contact with the Divine, seeing the “face” of God, so to speak. Of course, I was on heavy morphine, and it all could have been a drug-induced illusion. However, this is the story as I remember it.

I had just finished a three-year apprentice tutelage, similar to a kind of psychiatric “residency,” with Dr. John Wolaver, M.D., Dr. Phillip Bakkus, M.D., and Dr. John Marshall, M.D., of Knoxville Psychiatric Associates, PC. Dr. Marshall was the head of Lakeshore Mental Health Hospital in Knoxville, Tennessee, and Dr. John Wolaver was a friend I had met socially. I was sanctioned by the three psychiatrists to administer the Hartman Value Profile (HVP) to their patients, conduct sessions with them, and use the HVP data to counsel them under their supervision. I was allowed to charge fees for the HVP analysis and counseling, with 25% of the fees going to the psychiatric group. This three year clinical experience allowed me to learn what the HVP scores meant in the context of psychiatric patient issues, and this apprenticeship has served me very well in all other applications of the HVP throughout my 40 year career as a professional axiologist.

I was a fairly successful axio-therapist with the help of the HVP. One of my first patients was a suicide case, a young woman with a small child, just divorced. Using the HVP analysis, I took her from a state of desperate misery to a very happy time in her life. She remarried a successful lawyer, opened a popular retail business, and became a lively community activist. We also had some serious criminal cases and were commissioned by their Knoxville defense lawyers to testify in court. I remember two of Dr. Wolaver's patients that were charged with crimes and were in ongoing trials. The first was a young woman who had been abused by her husband for 5+ years, finally could not take it anymore, and one morning she went to his job site and shot him to death in front of his co-workers. In another case, an elderly female kleptomaniac had stolen a few suits, the size of which fit her deceased husband. In both cases, the court allowed the results of their HVP admitted into evidence for their defense. The HVP data and reports did not get them off, but I am sure the HVP report results helped them get reduced sentences. The lady who shot her husband received a prison sentence of only 2 years, and the female kleptomaniac received a suspended sentence of 11 months and 29 days, with five year's probation.

Dr. John Wolaver was my good friend, and we were both members of a local political party action committee (PAC) in Knoxville. We had many personal adventures with Dr. John, including hiding bags full of Krugerrands from his wife when he went through a nasty divorce in 1979. The long and short of the divorce was, his wife became victim of a strange cult wearing white robes and driving white Cadillacs. She divorced him, taking both his houses, his boat, and his airplane; she gave it all to the cult, and

renounced the world to join them and await the fulfillment of their promise for her to receive an admission ticket directly to heaven. She was one of his patients before he married her, and it is no wonder she was deceived by those cult members. The memory of this *cult*, with its hokey deceptions and lies, is one of the main reasons to pursue greater clarity about God and God's creation of man, *homo-sapiens*, a being knowing good and evil. We certainly do not know how this actually occurred, but it is a good mental exercise to speculate about it and try to interpret the metaphorical stories in the ancient sacred texts to examine how *homo-sapiens* became imbued with a *deontic logic* capacity in the brain, the *ought* as opposed to the *is*, the core of human judgment captured by the HVP.

Dr. John Wolaver was certainly my second mentor after Robert S. Hartman, and Dr. John is the main reason I am living today. In his own right, after working with me as my counseling supervisor, he became a very good axiologist, understanding therapy as a means of developing more goodness in individuals. When going from Lakeshore mental hospital to his private practice, he stopped by my hospital room *every day* and told me on each visit, "Get up out of the bed and we will find the bastards who shot you." He continually built up hostility and anger in me, and it became so intense I actually did recover more rapidly. After three months I got up out of that rotating special bed, at first taking a few steps with several chest drainage tubes on each side of my abdomen.

We had already formed one of the first axiological service companies, Axiometrics, Inc., when I was shot in the home invasion. Axiometrics had an *Aleph* logo. It was formed together with Professor John W. Davis and Wayne Carpenter. After being released from the hospital, I could work for only two hours per day, and I dictated the first HVP report debrief *Manuals of Interpretation* in daily discussions with Wayne while having several chest tubes still draining my abdomen. Wayne was a great help in translating my clinical knowledge into business language, among other aspects. When we closed Axiometrics to go into the sports business, Wayne continued HVP work with some of his business associates in Nashville, and he has become one of the most successful axiological providers in his company, Axiometrics International, formed with Bob Terrill.

As you can imagine, I am grateful for my hostility, since it saved my life. My hostility was and is balanced by an intense desire to further develop formal axiology due to a vision I had, which was like receiving a message or directive from God. This may not be *literally* true, of course, but it is how I experienced it at the time. My idealistic vision was to develop value science to the extent it would be used to achieve peace and harmony among the peoples of the world and help advance all societies around the world toward a *type one civilization*. The types of civilizations come from the work of the Soviet Russian astronomer, Nikolai Kardashev (Kardashev, 1964, 1984), and is a method of measuring an advanced civilization's level of technological and social advancement. The scale from type one to type three is only theoretical, but it puts the energy consumption of an entire civilization into a *cosmic* perspective. The scale has three designated categories, *Types I, II, and III*. These are based on the amount of usable *energy* a civilization has at its disposal, and its degree of space colonization. In general

terms, a Type I civilization has achieved mastery of the resources of its home planet, Type II of its solar system, and Type III of its galaxy. The human civilization as of 2011 is currently somewhere around 0.72, with calculations suggesting we may attain Type I status in about 100 years (but much less if we apply formal axiology to our social problems), Type II status in a few thousand years, and Type III status in about 100,000 to a million years.

When I was very close to death, I had information transferred to me from God (or experienced as such), and I was imbued with an insight which became the Master Axiological Pattern or MAP for all value and valuation. Its 351 cells range from the pattern with *zero value* (all negative showing the absence of value) to the pattern of God or the *creator pattern*, where the value is so intense in over-valuation in all dimensions that it *has to create* and *recreate* itself. This outcropping of my experience with the Divine took me several years to crystallize after being so close to the “face” of God and not understanding what it really meant at the time.

The MAP creation could be a result of *waking up* the *axiological genome*, which was first introduced by God into the DNA of humans so they could receive, store, and retrieve knowledge, assign meaning to it, and on that basis make evaluative decisions. I would say that formal axiology is the science of value and *applied* formal axiology can become the science of life.

When contemporary scientists complete the mapping of the genetic code in our DNA, they may be able to separate the animal from the Divine elements of our DNA. In my view, axiological value and valuation belong to the Divine elements, not to the animal or primate parts. In any case, this is certainly food for thought and what we may learn from the Divine DNA elements at some time in the near future could actually lead us to a *type one civilization* of peace and harmony on this planet.

I do not think we can achieve this vision with a science of value alone, a purely formal axiology, but *only* with an *applied scientific axiology* that shows us how we can advance (or evolve) from *homo-sapiens* to *homo-axiologicus*, the *intelligent-ethical man* who creates new values for world collaboration in a type one civilization.

The following expanded diagnostics for the HVP present important steps in this direction. They show additional dimensions of human beings, identifying where we can focus our efforts for the axiological improvement of our humanity and our individuality.

2. Expanded Diagnostics for the HVP

I am more committed than ever to advance the goodness of humanity in all societies throughout the world by employing *applied formal axiology*, as described above. This document introduces a significant innovation in the HVP axiological assessment which sheds new light on the nature of human value character. It is perhaps the most interesting development since the *enneagram*, with its nine human character types, which emerged centuries ago.

The demand (or search) for better characterization and more effective evaluation of peoples' strengths and weaknesses is *enormous* for linking jobs with peoples' talents and

for coaching people to improve and further develop their potentials in many ways. I have a lot to say about why individuals and organizations would want to use this “innovative and disruptive” value measurement technology, but this essay is not a sales or marketing document. This document provides logical and historical information that lies at the foundation of our applied axiological technology. This *innovation* allows us to look behind the curtain, meet face-to-face with the Divine within us, merging Western and Eastern thought about the origins of humanity.

This is also a report on the success of recent major advancements in the diagnostics of applied formal axiology. It emphasizes the *Good—in application* mode. It is always refreshing to write or read about advances in Good and Goodness, particularly when the local and national news is inundated with reports on human conflict, tragedy, misery, natural disasters, oppression, mass murder, and the like. This paper opens the door to the new field of *applied formal axiology* in detail, and it closes with an expanded axiological diagnostic for the Hartman Value Profile (HVP), the original axiological assessment, with postulates about how it ought to work in practice. Of course, a lot more *empirical* research needs to be done to prove the efficacy of the expanded diagnostics shown here.

3. Robert S. Hartman, Creator of Formal Axiology

Robert S. Hartman created the first logic-based *hierarchy of value* in the 1950s and applied it to create his unique scientific value profile assessment, the Hartman Value Profile (HVP), first introduced to Erick Fromm’s group of psychoanalysts in Mexico in 1960. This was an extremely important development. Fredrick Nietzsche said that the next great discovery in philosophy and science would be the establishment of a *hierarchy of value* (Nietzsche, 1972, 568-569).

Hartman first defined an “axiom” of value (the foundation and basis of truth) and defined three basic kinds of concepts covered by the axiom, ideas (systemic value), things (extrinsic value), and unique living conscious beings (intrinsic value). The axiom of value as stated in the *Structure of Value* is, “*a thing has value to the degree it fulfills the intension of its concept*” (Hartman, 1967, 103). A *concept* is understood to have at least three basic forms, 1) strict definition in words or symbols, 2) perceptual description, and 3) thorough description and explanation.

Any given kind of object value can be valued by the same form of value or by a different form in a combination of the object’s value content (*value*) and how a conscious human mind may judge its value (*valuation*). Combining *value* and *valuation* is the essence of the value hierarchy. There are nine possible combinations of value and valuation with *constructive* meaning content and nine possible combinations with *destructive* meaning content. The value hierarchy links the nine constructive and the nine destructive results for a binary value hierarchy of three dimensions, constructed on the assumption that everything has value (or meaning) to a degree. There are degrees of value goodness or enrichment and degrees of value decay, badness, or value impoverishment. How much value a binary thing has can be measured by one of these eighteen distinct levels or gradations of meaning from “best” to “worst” relative to a

given class or norm. The binary values are combinations of an object being evaluated (valued or disvalued) according to meaning assigned to the object by a human mind. The formal value hierarchy is best understood as the logic of *meaning*. The combinations have mathematical results that are accomplished using exponentiations cardinal numbers in set theory, and this paper provides a simple common sense proof using functions for the axiomatic validity of the hierarchy. The *mind of God*, so to speak, functions with transfinite mathematics, and this is how we were made *in God's image*, in my view.

This paper is written to introduce an expanded method of axiological assessment data-sorting and reporting, using both the BASE (*value*) and the EXPONENT (*valuation*) constructs within the value hierarchy, following the phenomenological *cogito-cogitatum* analytic (cca). Since this involves a radical and dramatic hermeneutical change (theory of interpretation and explanation), the rationale explored in this paper is necessary for a baseline understanding of *applied* formal axiology. The expanded diagnostics are obtained by adding the EXPONENT analysis to the BASE analysis constructs, and this gives us a much clearer image of a respondent's capacity to discern value in the surrounding world, plus a much clearer image of how a respondent appreciates himself or herself. How people value key aspects of the world around them can now be *measured in six ways* or from six separate and distinct perspectives. This new understanding includes the three dimensions of the original Hartman Value Profile, the BASE constructs of intrinsic, extrinsic and systemic *value*, revealing a person's *capacities to judge the worth of objects* according to these dimensions; *plus* the three dimensions centered in the *method or means of value judgment* in the EXPONENT constructs, namely, intrinsic, extrinsic and systemic forms of *valuation*.

We can now measure the mental talents and skills to discern *object value* (Latin: the *cogitatum*) in the three kinds of objects in the surrounding world, and we can also measure the *habitual means of valuation* (Latin: the *cogito*) that a person *prefers to use* when faced with evidence presented to conscious awareness in direct experience. This *evidence* is then sorted into one of the three ways or forms of valuation. This analytic was established by Edmund Husserl as a fundamental method in transcendental phenomenology (Husserl, *Cartesian Meditations*, 1929) as preconditions for a *scientific method* of value and valuation. In the works of Husserl, every *cogito* has its *cogitatum*, that is, every conscious act *intends* an object, regardless of whether the object is actual or fictitious. Husserl is well-known for discovering this essential aspect of conscious awareness, namely that consciousness is *intentional* in nature.

With this method, we can make a science out of anything, even "square circles" that cannot even exist in actuality. Robert S. Hartman applied this method to *value*, laying the foundations of a *science of value and valuation* (Hartman, 1967). However, Hartman did not complete this vision in his lifetime.

The diagnostic circle of value analysis is, with this document's revelations, complete. The results of *any* 18 item binary forced-ranking axiological assessment like the HVP can now be revealed in a thorough *cogito-cogitatum analytic* or "cca" for short. The *cogito* is the *act of consciousness*, and the *cogitatum* is the *object of the act of consciousness*. In the Hartman Value Profile (HVP) the *cogito* is measured in the

EXPONENT constructs, while the *cogitatum* is measured in the BASE constructs. Since Hartman was most interested in an objective science of discerning object *value*, he began the HVP with the BASE constructs, structuring the evidence of value presented by objects, and he neglected the forms or methods of valuation in conscious subjects.

Hartman did begin to probe into the import of the EXPONENT constructs when he created the first parallel form, what everyone calls the “*Research Version*” of the HVP. A careful analysis of the groupings of the Research Version will reveal why the proxy statements had to be changed to fit the potential expanded model I think Hartman was envisioning.

Clearly, when I use both kinds of constructs together, I get a *thorough image* of a person’s value judgment capacities. In combining the two, by going back to its source in transcendental phenomenology, I now have established an elevated and expanded diagnostic for any axiological assessment.

4. Witnessing the Emergence of a New Science

This insight began in 1960, 42 years ago, with Billie Cannon Elliot’s dissertation on the Hartman Value Inventory (or Profile). This was a study of around 1900 cases from three colleges and universities, equally split between students, faculty, and administrators. Robert S. Hartman was on her dissertation committee, and I was invited to attend and hear her defense. Dr. Elliot’s dissertation was entitled *Factor and Cluster Analyses of The Hartman Value Inventory: A Study of Item Homogeneity and Factorial Invariance for Normative and Ipsative Scales*. It was presented to the Department of Education at the University of Tennessee in June, 1969. Elliot discovered that only 2 out of 6 items were identified in the BASE dimensions *as belonging to that dimension* by most respondents, and she suggested using the EXPONENT dimensional constructs to better cover the nature of human evaluative judgment in the Hartman Value Inventory or Profile (HVP). Hartman took this very seriously, and he began work on an alternative, the HVP “*Research Version*.” I believe that using both dimensional facets (value and valuation) is where Hartman would have eventually focused his efforts.

Since 2007, I have been involved with professional sports coaches, especially Jeremy Boone, and we have seen the need for using both facets (value and valuation) of each value dimension to better capture sports performance talents, skills, and needs for growth. Coach Boone has just published a new book entitled, *Parent Your Best*, based on his development of *Sports Axiology* (Boone, 2011). Jeremy’s book involves some of the expanded axiological diagnostics discussed here. I first noticed this need when I went from the team sports axiological assessment to a single player axiological assessment in an individual game like golf. I could use the BASE intrinsic construct very well for team sports, but for golf players, I had to go to the EXPONENT intrinsic construct, which addresses the holistic unique situation. Golf is not a team sport involving teammates. I have examined over 7,000 sports assessments to date, and all showed the need for both kinds of value measurement constructs in all three axiological dimensions. Using only the BASE value dimensional constructs is not sufficient to get

a useful diagnosis or a prescription for improvement in most areas of application. When I use both facets of each axiological dimension, I obtain *six basic clarity measures* for the world and another *six for self-appreciation*, which helps enormously in sport performance diagnostics.

To create a value judgment assessment like the HVP, one must select parallel linguistic proxies for each of the value hierarchy formulae, mix them up randomly, and ask respondents to rank the items from best to worst, according to the value they see in each item. This process reveals the person's decision-making, in real time. The highest value item on the HVP is "a baby" representing the I^I , an intrinsic value—valued intrinsically, while the very worst item is "torture a person," the intrinsic devaluation of an intrinsic object.

The ranking deviations from the value hierarchy are gathered in three dimensions, and the collection of six deviations in each of the three dimensions makes up one of three dimensional constructs. I can see which value dimension is clearest to the respondent where the sum of deviations is the smallest, closest to the logic norm. I can also see the relations among all three dimensions. Some critics say that traditional set theory collapses the first and last three formulae as being equal, but this elevates one kind of math over the meaning of life. The formal value hierarchy combines mathematics with the meaning of life. It is the *math or logic of life* that is captured by applied axiological science.

5. Brief Proof of the Value Hierarchy

It seems to me that a mathematics system for a formal axiology is not all that difficult to understand. To have a mathematics system, a series of symbolic objects are defined, and rules are set in place for relating and manipulating the objects. As most readers know, mathematics is centered in *systemic* value, constructs created by the mind. Therefore, it should be possible to construct and introduce new rules for the the transfinite insights of Hartman. I have heard and read many criticisms of the use of transfinite math in Hartman's work, but not very many that attempt to further develop transfinite math into an operational value measurement system. This, however, is my focus and what I am attempting to accomplish. I suggest the following method as a workable possibility.

I can differentiate levels of meaning in the intrinsic dimension, or in any dimension, by choosing operational *functions* according to the value dimensions in combination. The *binary combinations* in the value hierarchy are such choice *functions* guided by the dimensionally defined objects. I can designate a function that isolates the systemic within the intrinsic for the I^S ; select another function that isolates the extrinsic within the intrinsic for the I^E ; and a third function that includes *all properties* within the intrinsic dimension, the I^I . That gives us a *hierarchy of meaning intensity* within the intrinsic dimension based on the assumption that I is greater than E and that E is greater than S, or symbolically $[I > E > S]$. This 13 level logic deduction was first developed in my doctoral dissertation (Mefford, 1989).

There are two ways of collecting the items into a dimensional construct. The first collects the BASE elements in the formulae from the like symbols at the *base*, and another collects the like EXPONENT elements in the second super or exponential level of that combination, the exponent level. When I rank a value according to its meaning, I utilize one of these two dimensional constructs, one is the judgment of the *object's value* (BASE) and the other is the *method or means of judging the value* (a valuation of the object's value) in the EXPONENT construct.

Next, I will explain the value hierarchy created by Robert S. Hartman and reveal the differences in constructs. To get an idea of how the hierarchy is put together it is instructive to know the thresholds of the dimensions. The systemic dimension is limited by "n," any definite finite number. The extrinsic is limited by " \aleph_0 " (aleph zero), a denumerable infinity holding *clusters* of properties. The intrinsic is limited by " \aleph_1 " (aleph one), a non-denumerable infinity expressed with *container* or metaphorical predicates. The elements of the formulae in the value hierarchy are combined by exponentiation, which yields a mathematical result. Hence, the hierarchy of meaning is based on this mathematical structure, from most intense to most impoverished.

Robert S. Hartman's transfinite cardinal number formalization is the first but not the only *model* within the scope of axiological science. There can be many other ways to accomplish the task of establishing a formal structure in axiology. However, Hartman's insight was the best model he could think of, and he well knew that this was only the "foundation" of a science of value. Hartman entitled his main book, *The Structure of Value: Foundations of Scientific Axiology* (Hartman, 1967). Hartman has endured many critics over the years, but in this paper, I attempt to erect an edifice of operations upon Hartman's foundations which, in my view, creates the science of *Applied Formal Axiology*.

The list below shows Hartman's value hierarchy with the original linguistic proxy items and phrases for Part I of the profile, omitting a repetition of the value hierarchy in Part II of the HVP, the internal world of the human self.

6. Robert S. Hartman's Value Hierarchy, with Original Items and Phrases

I^I

E^I

S^I

Increasing value gain † I^E

Compositions:

I^S

E^E

S^E

E^S

S^S

FACT -----

S_S

E_S

S_E

E_E

I_S

Increasing value loss ↓ I_E

Transpositions:

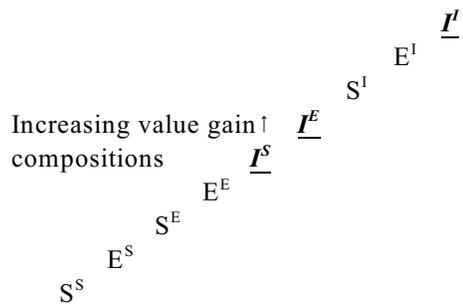
S_I

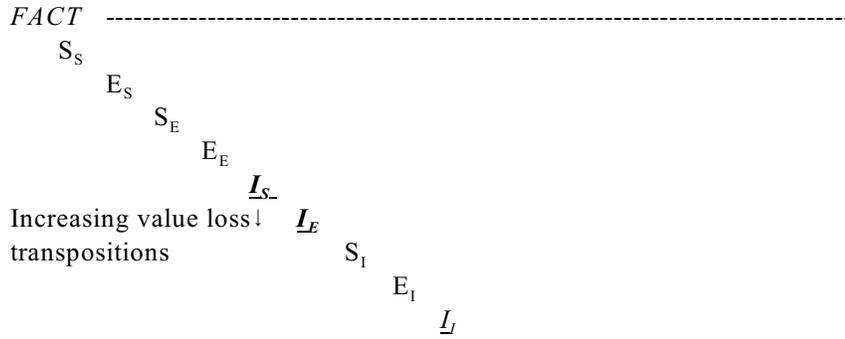
E_I

I_I

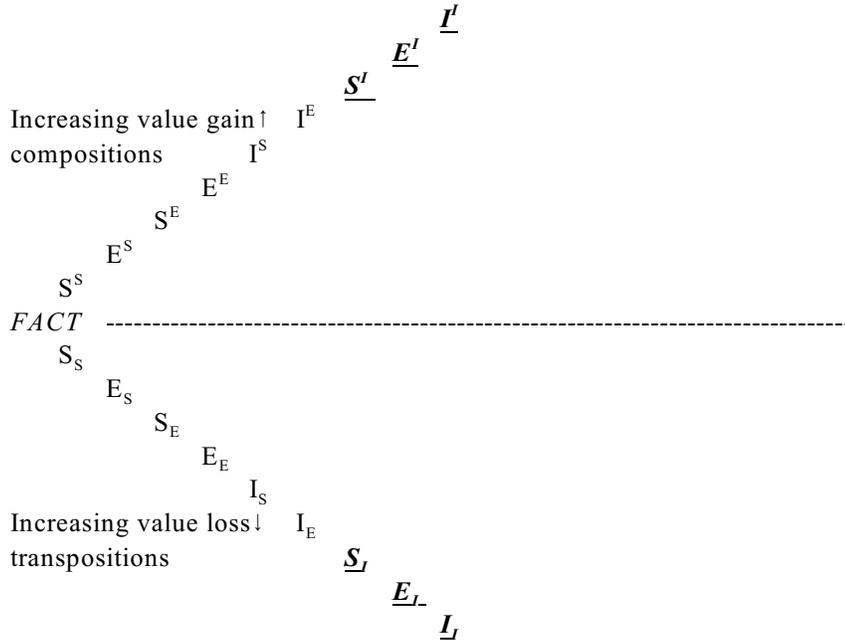
Intrinsic Value Constructs

Hartman's BASE *intrinsic* constructs of *value* are underlined in bold italics below.





Next I show the formulae grouped by the intrinsic EXPONENT—valuations in bold underlined.



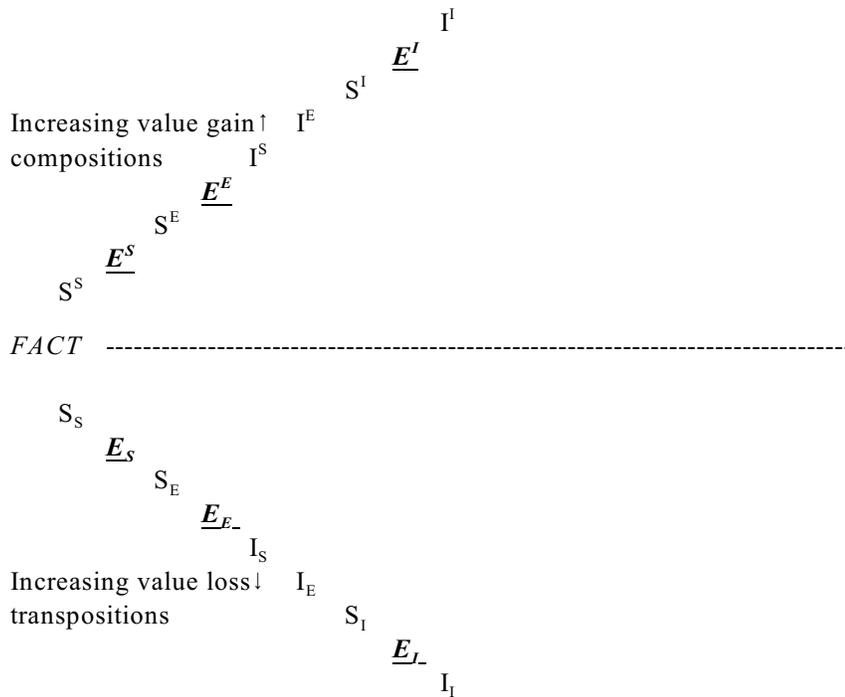
Hartman’s BASE intrinsic construct shows the levels of value for an intrinsic object (persons) while the EXPONENT intrinsic construct shows the levels of merging any kind of object into the dimension of *intrinsic valuation*, or *the intrinsic valuation of an entire situation* involving people, things, activities, and system elements (such as *discussion topics*, or whatever). An intrinsic valuation pulls everything in a situation up into its maximum meaning. It is a little like shining more light onto everything in a segment of time. That is clearly a unique situation, unlike any other that ever existed in *all* its details. It includes all connecting points to the immediate past, and all potential

connecting points into an immediate future state of affairs. An intrinsic valuation would be the best way of fitting the situation into the continuum of past-present-future.

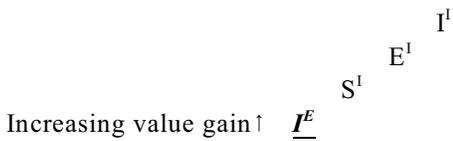
The intrinsic construct used by Hartman with BASE elements may be named, “*Empathetic Outlook*” or better the “*Understanding of Other People,*” while the construct made up with EXPONENT elements would be something like, “*Grasp of the entire situation*” or the “*Capacity to discern what’s going on in any given unique situation,*” as related to the past and the future. The intrinsic holistic construct measure allows us to see how a person tends to interpret *this unique* situation, linking it to the recent past events, and linking it to the expected future. The intrinsic EXPONENT construct collects ALL properties together to satisfy the *coherent* demands of our understanding.

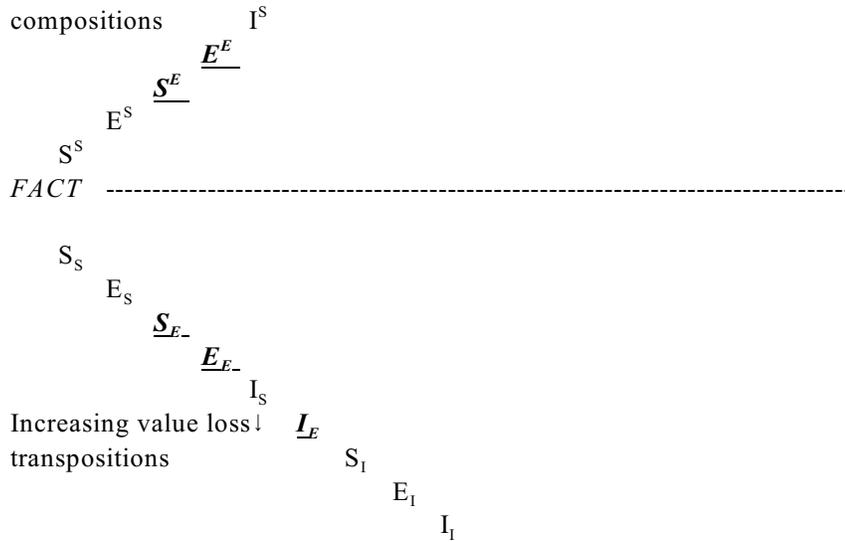
Extrinsic Constructs

Hartman’s BASE *extrinsic value* constructs are underlined in bold italics.



The formulae grouped by the EXPONENT is *extrinsic valuation*.



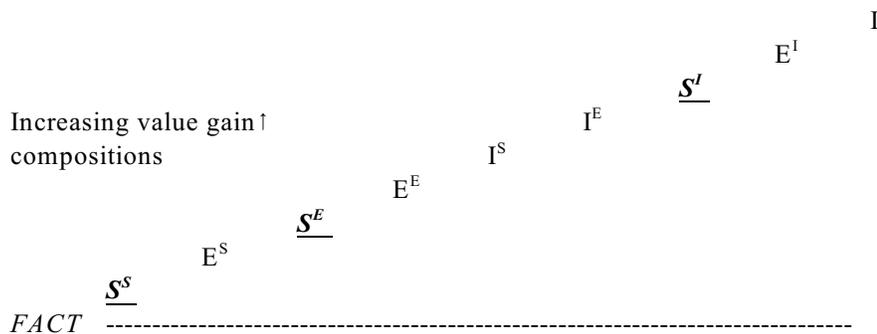


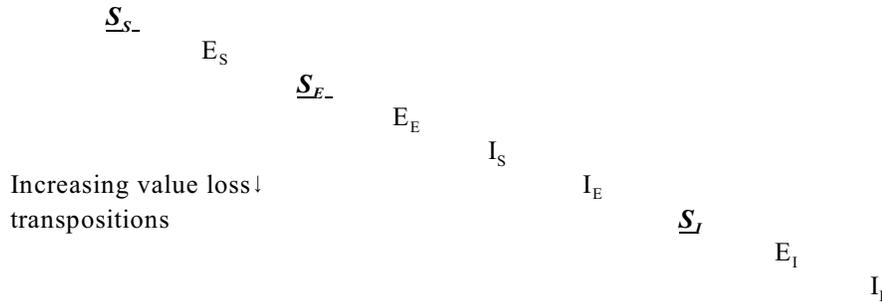
Hartman’s BASE extrinsic construct shows the levels of value for an extrinsic object (things, processes, and events) while the EXPONENT extrinsic construct shows the merging of *any* kind of object *into* the realm of *extrinsic valuation*, or *the extrinsic valuation of everything* involving tangible, observable things, activities and perceived elements such as *having a goal or mission and taking the steps necessary to get there*.

The extrinsic constructs used by Hartman with BASE elements could be called “*Practical thinking*,” even better, “*Understanding actual social and economic activity*,” while the constructs made up according to the EXPONENT elements are the “*Capacity to actually do it*” or the “*Capacity to perform tasks at hand*.”

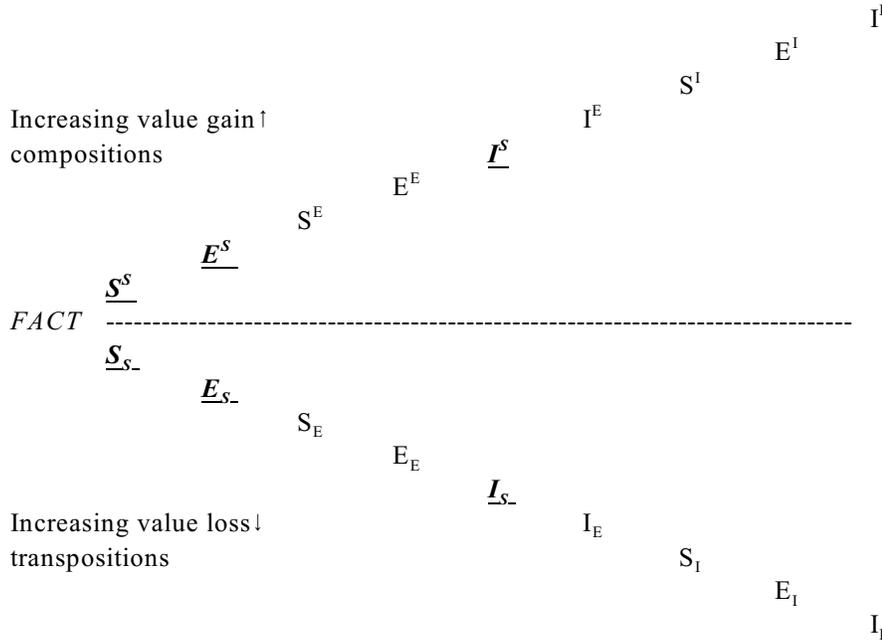
Systemic Constructs

Hartman’s collection of binary BASE formulae for systemic *value* is as follows.





If we use the EXPONENT grouping, we get the following systemic *valuation* constructs, again underlined in bold italics.



Hartman’s BASE systemic constructs show the levels of value for a systemic object (mental constructs, language, and all system elements) while the EXPONENT systemic constructs show the levels of merging *any* kind of object *into* the realm of *systemic valuation*, or the *systemic valuation* of anything involving a future imagined strategy or plan, and conceived elements such as *Integrating any change into the situation, and thinking about all possible outcomes of integrating this change*. This capacity indicates a person who can choose the best ways of embracing change.

The systemic constructs used by Hartman with BASE elements is currently named “*systems judgment*” but could be better named “*Understanding perspectives on existing*”

system and order," while the constructs made up with EXPONENT elements could be named something like the "*Capacity to think ahead*" or the "*Capacity to plan for the best outcome.*"

6. Applying the Expanded Diagnostics to The Hartman Value Profile Assessment Results

The analysis above comes from the logical foundation for the standard Hartman Value Profile (HVP). The meaning of the results below are updated and articulated according to the expanded diagnostics. The common interpretation of the result categories of the Hartman Value Profile are summarized as follows when adhering strictly to the value hierarchy.

The following interpretation is based upon a limited number of cases and must be considered as the best possible thinking I have at present with the cases analyzed from several targeted profiles, including many sports assessment results.

External World, BASE Constructs:

Judging Actual Value Contained in Objects of our Experience.

1. Intrinsic Value

Understanding the value of *people and interpersonal relationships* in three axiological valuation dimensions:

- Other people as unique individuals, social acquaintances, and any person,
- Loved ones and family (I),
- Sensitivity to the external drama in others' life situations (E),
- Human population and other aspects expressed in numbers (S).

2. Extrinsic Value

Understanding *social and economic value* in our world is the *extrinsic* perspective on value content:

- Material things, events and processes,
- Projects and tasks, what is done and when it is done,
- Social and professional roles, behaviors and appearances,
- Economic and cultural norms.

3. Systemic Value

Understanding the value of *knowledge, language and systems* is the *systemic* perspective of value content:

- Authoritative order: laws, policies, rules, procedures,
- The ordering mechanisms of knowledge, language, and written law,
- Learning and knowledge, thinking and planning,
- All structures, systems, organizations, concepts and construct values,
- Ideas and ideals.

External World, EXPONENT Constructs

Means or Method of Valuation by Habitual Preference:

This section shows the various ways people habitually *prefer* to view, judge, or assign value or meaning to any given thing (not necessarily what the object meaning actually is). This is a strong indicator of a person's behavioral conditioning and decision-making habits made evident in their preferred *e-valuation process*, as opposed to their understanding of value presented by the content in the object. For example, people can have an excellent *understanding* of other people, but they may utilize this understanding, by habit, in a manipulative or punitive way, as opposed to being helpful and supportive of others (another habit). People learn to *e-valuate* in certain ways due to a long series of repetitions of what worked for them in the past while coping with circumstances for survival.

4. Intrinsic Valuation:

"*Grasping of the entire situation*" is the label for inclusive *intrinsic Evaluational* judgment. People with an *intrinsic value preference* tend to *see the whole situation in its uniqueness* in a totality including all aspects of the situation. Each day is a uniquely brand new day, in some respects, for this behavioral or valuational style. People who have talent in this area can enter any situation and rapidly discern "what's what," how the situation fits in with the immediate past, and how it will morph into the immediate future. They tend to strive for harmony with everything around them, recognize uniqueness, and are highly *intuitive* in their decision-making. They can feel-into the situation. The downside of this perspective for most people is that they tend to assume that all is well and in harmony, when their situation may not be as stable and certain as they think.

5. Extrinsic Valuation:

The *Practical "Can Do"* capacity is the *extrinsic valuation* ability. It measures how strongly a person desires to make everything fit together in terms of practical utility. It answers the question, *How can a thing, idea or person be best used or made most useful?* People with an *extrinsic valuation preference* strive for utility, always keeping an eye on what works best in a practical sense. They are good at classifying and comparing, weighing the pros and cons of situations, and tend to be *analytic* in their decision-making. People with talent in this area will immediately know if they can accomplish tasks or if they cannot.

6. Systemic Valuation:

The *Thinking Ahead [Forward Thinking]* valuation preference is the *systemic valuation* capacity. People who excel in the *systemic valuation preference* typically ask, *What is the best way to organize everything and move ahead while extending the present order to best incorporate change?* They tend to strive for structure and organization, and they focus on how best to introduce sequential order into the situation at hand. This

behavioral or evaluational preference reflects people who are *linear or logical* thinkers and *future focused* decision-makers.

Internal Self-Appreciation World, BASE Constructs

Internal World of Self-Appreciation:

Discerning Personal Worth According to Past Evidence—My Own Being

This section reveals how people value their own worth in the world according to their agreement with self-appreciation and self-depreciation statements. This agreement is based on experience and evidence from past achievements, or the lack of achievement.

1. Intrinsic Self (Your unique individuality, different from all others)

Sense of Self-Worth by Evidence is the “intra-personal” perspective:

- Who you really are in your uniqueness, supported by past evidence,
- Grasp of total self-worth based on past successes of thinking, doing, and being,
- Clarity of personal strengths, weaknesses, and potential for growth.

2. Extrinsic Self (Role Identity)

Job/Role Fit is the “external-self” perspective.

- Job suitability according to talents and abilities,
- Integration of all roles in life (personal and professional),
- Personal satisfaction with roles,
- Harmony and balance among different roles.

3. Systemic Self (Self-Image and Self-Concept)

Self-Image is the “structural” self-appreciation perspective:

- Self-knowledge of capabilities,
- Self-standards and rules to live by,
- Self-organization and discipline,
- Self-image and self-concept centered on what you can do,
- Seeing definition of self and its unity.

Internal Self World EXPONENT Constructs

Discerning Personal Worth Existentially

The Worth of My Own Self According to What I am Becoming:

This section reveals how people appreciate their own *dynamic* self (Personal Valuation by Intuition). This shows their *habits* of self-valuation in terms of who they want to become in the future—the journey toward their ideal self.

4. Intrinsic Self-Appreciation*Intuitive Self-Worth (existential):*

- Sense of Self and harmony with all existence simply by your presence in the world,
- The difference you make by being in the world with potential to grow the “Best Possible You,”
- Your spiritual connection and the personal development of your spiritual potential.

5. Extrinsic Self-Appreciation*Job/Role Engagement:*

- Personal activities, actions, and appearances,
- What you prefer to *do* with your thinking, performance, talents, and feelings,
- How intense your engagement is in your job, profession, and all roles,
- Being fully present in your job/roles.

6. Systemic Self-Appreciation*Self-Direction:*

- Emphasizing where you are headed in the future and how to get there,
- The person you desire to become and the life situation you desire to bring about,
- The movement toward your Ideal Self.

7. Other Doors to Open

Of course, much more research needs to be done to further unveil the meaning of the constructs described here. We also should open our minds to the possibilities of where an expanded applied formal axiology could lead us. Axiologists should be a part of the national discussion on many of our social and interpersonal issues, and they should offer reasonable axiological solutions. I am currently conducting research on several of these issues, and I am learning a lot more about human value and valuation in many diverse areas of society. I look forward to sharing whatever is discovered on this continued journey to find new axiological pathways toward a type one civilization.

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THE PURPLE COW: MARKETING AND AXIOLOGY

John A. Anderson

JOHN A. ANDERSON speaks a language that starts with a smile, is interrupted by a chuckle or ends with a perfunctory punch line; but it's all relevant to the conversation just the same. What may seem like fragmented discourse is merely alternatively structured and a well-thought journey to a prescribed conclusion. He is a marketing specialist, planner, and strategist. He is a consultant whose experience spans over 30 years. He has served as a President and CEO, Director of Marketing, National Sales Manager, and in a number of corporate positions involving business start-ups and growth and expansion companies. He was involved in the early development of several Internet enterprises and served on the ethics committee that wrote the Code of Ethics for the Internet Gaming Council. He personifies the term "*people person*," and he lives the phrase *joie de vivre*! His e-mail address is: johnanderson@jonznet.net.

Abstract

Using a purple cow as an image, this work presents the need to convey a fresh approach in expanding interest and understanding with regard to the science of axiology. Further it expresses the thoughts that marketing can benefit from axiology, and that axiology needs to broaden its acceptance to both business and the world population in general. By combining marketing theory with the science of axiology, finding out what people regard as valuable can be translated into a viable part of the marketing process. To do this, axiologists need to see themselves and this science through the eyes of a marketer, and then they can then begin communicating how axiology can benefit marketers and problem solvers everywhere. The fact that axiology is Internet friendly serves that it can begin to move itself into the radar of hundreds of millions of people who are searching for value in all things. One key to the success of this effort is to create an image that can be virally caught and transmitted across the Internet in a way that makes axiology remarkable. When the value of this effort is realized, learning more about axiology should become a desired experience to many individuals and a continuing success in axiology's scope of development.

Introduction

If you have an interest in the bovine species, the entire subject of cows can be an exhaustive conversation, or conversely of little fascination to anyone who doesn't deal with them on a daily basis. One such group of interested parties must be the people responsible for estimating the worldwide headcount of these animals. This, by some sources, is estimated to be above 1.2 billion animals, and our collective thanks should go out to those who count them. There is a generally accepted conclusion that this quantity probably would rank cows among the largest and most common group of animals under human control. Aside from judging them at various state and county

agricultural fairs or auctions, it would be safe to say that the value of these animals to the population at large is given very little thought. As a matter of fact, until the topic of the many benefits that cows have to offer the world-wide population is raised, they remain a forgotten and invisible lot. They are normally ignored and are considered quite unremarkable by most. *That is, until you see a purple one!* That is where marketing enters into the picture. Almost everyone has heard of the advertising campaign *Got Milk?*, or the plea of those hapless cows that beg us to *Eat More Chikin!* Of the hundreds of millions of consumers caught by these phrases, few have seen a purple cow, but many have consequently been trapped by the illusion of one, and the image seems quite pleasing.

Marketers by their collective creative brilliance will occasionally bring images like these into the spotlight that would have otherwise remained unnoticed. These glimpses of the unusual will then garner enough time to be included in our conversations and circulated willingly among our many contacts with family, friends, and associates. Marketers know that in those situations we hold the greatest influence as credible supporters or harmful critics with respect to efforts to gain favor with potential customers. In particular, it is in that window of presentation that *the unremarkable can gain attention* and that marketers can succeed in bringing together the otherwise mundane with an energized mainstream. Only when I see something as remarkable as a *purple cow*, am I willing to talk about it and tell my friends to take a look. If a marketer can conjure up a purple cow, it invariably will move his product or service into the mainframe of a people's thought processes and transport it along their thinking map to a place called *notoriety*. How it is received will determine if that destination will result in a contagious stream of acceptance and activity, or become an overstocked warehouse filled with a marketer's dream.

A big idea can spread like a virus that is passing between family, friends, or a group of receptive hosts. All it takes is a sneeze. So, if marketers will position the purple cow in a place where one person will find value in it, then it will be rapidly pointed out to others. In today's advancing world of high-speed Internet and personal communication devices, a simple sneeze through the social media pipelines of Facebook™, YouTube™, Twitter™, and other popular electronic gathering places, can quickly determine the success or failure of a product or service for a business and its brands. There is little doubt that marketers and the process of marketing could use some positive hearty sneezers. Nothing attracts attention in a crowded room like a resounding sneeze and a responding shout of *gesundheit!* Ultimately, for the entrepreneur and the marketer, it can mean reward, promotion, or termination to those responsible for the energy, focus, and attention expended in the creation and delivery of such a phenomenon.

Generally, it is understood that marketing is based on theory, but at the end of the day it remains a complex process that is geared toward creating value for customers, with the idea of receiving value in return; this is axiology applied to advertising and communications. The marketer is challenged by virtue of his responsibility to carefully select strategies that are intended to attract customers from four groups. The underlying objective for the marketer is to create, uncover, or respond to a desired experience that

lies buried in the thoughts of highly insulated consumers. These end-user groups are considered by most marketers to be prospects, customers, loyal customers, and former customers.

The defined strategies of a marketing plan relate to how the marketer expects to find, attract, and win new clients, nurture and retain those customers the company already has, entice former clients back into the fold, and reduce the overall costs of marketing and customer services (Berry, 1983, 146). The *hope* is to successfully *provide for a give and take value proposition* and ultimately to achieve a growing base of loyal customers. It's a lot to consider since most traditional marketing theory is based on a form of research that is designed to mine a group's thoughts in an effort to generate various protracted conclusions from a marketer, or the marketing department. Few marketers know how much they could greatly benefit from the science of axiology, and fewer yet understand how the importance of an axiological assessment could become vital to the research process and improve the overall probability of success. Marketing needs axiology, and axiology needs to be marketed. It's all about value, and there is tremendous value in a purple cow for both marketing and axiology alike.

Seth Godin, who is described as an author, entrepreneur, and agent of change, believes that *the key to success* is to stand out from the herd and be remarkable. This is not a new concept in the overall theory of marketing, but it certainly has value in more ways than one. In all probability, Mr. Godin is unaware of the science of formal axiology, much less how the application of axiology can dramatically improve the success of any marketer's efforts. In his most recent book, *Purple Cow: Transform Your Business by Being Remarkable*, Godin tells this story.

When my family and I were driving through France a few years ago, we were enchanted by the hundreds of storybook cows grazing on picturesque pastures right next to the highway. For dozens of kilometers, we all gazed out the window, marvelling about how beautiful everything was. Then, within twenty minutes, we started ignoring the cows. The new cows were just like the old cows, and what was once amazing was now common. Worse than common: It was boring (Godin, 2009, 2).

He continues,

Cows, after you've seen them for a while, are boring. They may be perfect cows, attractive cows, cows with great personalities, cows lit by a beautiful light, but they are still boring. A Purple Cow, though: Now, that would really stand out, for a while. The essence of the Purple Cow is that it must be remarkable (Godin, 2009, 3).

The reason it would shine among a crowd of perfectly competent, even undeniably excellent cows is that it would be *remarkable*. "Something remarkable is worth talking about. Worth noticing. Exceptional. New. Interesting. It's a Purple Cow. Boring stuff

is invisible. It's a brown cow" (Godin, 2009, 3). As it relates to axiology, a purple cow in the eye of the beholder creates an immediate value of rarity, uniqueness, and something of intrinsic importance – all of which tend to ring bells in the ears of a savvy marketer in charge of product planning and development.

There can be more than hope for a company that chooses to lead and guide the marketer into a better advantage for success. It is simply a matter of combining the theories of marketing with the science of axiology. It is also based on the supposition that it is more important to present *not what is valuable, but what people regard as valuable* (Internet: [Science of Axiology](#)).

Robert S. Hartman was a logician and philosopher. His primary field of study was scientific axiology, and he developed the Hartman Value Profile (HVP) as an *assessment* to determine what people regard as valuable by measuring concept-formation and decision making capacity. This can be a remarkable tool in the goal of maintaining customer loyalty because it gives the marketer a detailed insight into almost any person's thinking process and their related buying decisions. The results from the HVP axiological assessment explore Hartman's three dimensions of value – systemic, extrinsic, and intrinsic. Where good and bad are mostly related to value and value judgments in terms of the extrinsic dimension, *the dimensions actually relate more to what perfection is to systemic value, what goodness is to extrinsic value, and what uniqueness is to intrinsic value* (Internet: [Science of Value](#)). It then becomes a very natural proposition that since axiology can measure the value of a purple cow in three dimensions, then all that is left is to use this information to lead the marketer to position a product or service in such a way that a desired experience will be achieved as a pool of loyal customers grows. And further, that rarity, uniqueness, and intrinsic value will take center stage.

But those dynamics alone do not provide the marketer with a complete perspective of value. A world renowned axiologist and assistant to Robert Hartman, Dr. David Mefford, was able to add a fourth dimension called *resonance value* as a tool to discover strengths and development opportunities between a business and its markets (Mefford, AXCES. Communications, 2008). This element of value easily breaks through to the complex process of marketing and the thought-processes of marketers alike. The resonance value as it relates to business and marketing is: By determining how customers perceive a business and its products and services, it can measure the resonance, or the indication of a customer's willingness to be considered a loyal follower of the company and its brand(s) (Internet, [Value Source Group](#)).

By measuring the resonance value along with the other basic dimensions of value, a company can adjust to avoid blind spots and management gaps in the marketing process. The overall situation is such that marketers in general, entrepreneurs, and other agents of change don't know this because they are first and foremost unaware of this fascinating and remarkable science called axiology. This is understandable when considering that marketing is based on theory, and it is composed of a multifaceted process that combines its own systemic and purportedly objective search for, and analysis of, information relevant to identifying and solving marketing problems and

determining the direction of a marketing plan (Chase and Barasch, 6). This theory-based research in reality is more aligned with paving the way to adopting an educated guess, or supporting a gut feeling, when exercising the four basic elements of a marketing scheme – product, price, place (distribution), and promotion. All of which are targeted at achieving its intended objectives – to launch and sustain a new or greater market share.

The value proposition or unique value a business offers to its customers tends to be underestimated in today's marketing war rooms for the simple fact that companies and marketers are unaware of the benefits of the science of formal axiology when assessing the various levels and characteristics of value. Economic value seems to reign supreme and is but one among many considerations of value. Value is inherently woven into the fabric of each product and service offered. In the current stream of marketing planning, part of the complex marketing process is to consider the many disciplines that make up marketing. Among these are research, product planning and development, distribution, pricing, advertising, public relations, and the complex issues of legality that confront every business. Each of these, as well as other elements in the marketing spectrum, should command a clear understanding of values far beyond the prevailing economic value consideration.

However, businesses currently rely on the age old practices of marketing theory rather than the more accurate scientific approach created by Robert Hartman and fine tuned by leading axiologists. Axiological tests and assessments can be created to address the objectives and goals of a company's vision and provide a complete evaluation of not only product and marketing issues, but productivity, human resources, and almost any challenge facing a business. The key question remains then, how does the science of formal and applied axiology make its way into the mainstream of business operations and management, or in this context into the limelight of marketing decision making? The answer lies in the fact that in and of itself, axiology as it applies to becoming a marketing problem solver, needs to create a purple cow to bring itself into the focus of business. The marketing solution, the science of axiology, must become a marketer in conveying its value to the marketing process.

For the most part the marketing of a product or service can be very unremarkable. As evidence, it is widely known that corporations and their highly paid marketing departments often spend hundreds of thousands of dollars, if not millions, on trying to attract their customers or clients to purchase what they have to offer. Consider Proctor & Gamble that spent millions of dollars in pre-marketing, and even pre-manufacture, to determine whether consumers would consider purchasing *Pringles* potato chips. Consumers readily embraced the uniform chips sold in *tennis ball* canisters once they recognized that it tasted good, there were just as many chips as in a bag, and the chips were less likely to be broken. Today, four decades later, P&G faces strong competition in the marketplace from Frito-Lay's *STAX* brand, as well as potential litigation from the snack food king.

Little is said of the facts that most consumers already have more stuff than they need, and that the prospect of having something forced upon them can prove to be more

of an intrusion into their lives and an assault on their senses than a *wanted and fulfilling desired experience based on what they want*. Television commercials have become a series of highly charged and volume pumping segments of pictures edited at light speed, and print advertisements are usually displays of forgetful images aligned with meaningless texts. The only thought that comes to mind in the process becomes a waste of time or space. Among the corporate elite and striving Fortune 500 wannabes, there is hope that the tried and true traditional means of marketing will provide economic success to their respective companies. As a result, most marketing falls into the ineffective category and is very boring, if not failing, in its efforts. And in the long run, Hertz is still number one while Avis continues to try harder.

However, some companies do venture beyond the bottom line and realize that there is more to the equation than the economic value to be gained by selling their products and services. These companies focus on a product's or service's uniqueness and combine that element with features and benefits designed to find, attract, and win new customers. General Motors faced bankruptcy and failing consumer confidence only to regroup and place emphasis on newer green technologies to assist in avoiding the abyss of corporate failure. More than half of the 1,300 patents filed by General Motors Co. in 2009 were green innovations – proof of the rapid development of groundbreaking technology by GM researchers and engineers, and a positive boost in public relations (Internet: GM.com). In the case of any automobile, it might be the outwardly sleek design, the fuel-efficient engine, or the ergonomic interior that will affect the purchasing decision of the customer. Other car companies might couple over-the-top customer service programs in the form of a *loaner car* while a customer's car is in for servicing, as this is used as a method of achieving satisfaction or nurturing its consumers. All of this is designed to affect the end-user's purchasing decision while spreading brand awareness and loyalty to retain that customer's purchasing power. Then if lost, as in the case of GM, customers are courted to believe that “new and improved” are reasons to try them again for the first time.

In the case of service oriented companies, a deeper value is placed on the emotional features and benefits and the characteristics found in those products and services that the company has to offer. Services can make you feel more secure, pampered, or even smarter because you thoughtfully made the choice of one service over another. For example, American Express has shifted its message from a company that provides exclusivity of ownership to one that makes an individual feel more deserving and special – *Great Credit Deserves Great Rewards*. All the while, now that VISA is accepted in more places than any other credit card, it has become the card of choice – *More People Go With VISA*, and that makes you feel more accepted and part of the *in crowd*. However, in the real world these tactics ultimately become the same old marketing songs that ring out tunes of products, people, places, prices, positions, promotions, and so on. It's known as the endless Ps of marketing theory. In this process, the competition for the end-user is intense, and the objective of business is to keep from losing market share or becoming unimportant and obsolete, *not to be remarkable*. To be remarkable, marketing must provide a purple cow to add to the list of Ps.

In determining what people regard as valuable, versus providing things perceived as valuable to consumers, there is a point where theory and science should work together to create a greater probability of success. On one side is the theory of marketing, and on the other is the science of axiology. The particular choice of traditional marketing theory, as it relates to quantitative and qualitative analysis, is based first on marketing research and the information that it provides. Even so, traditional marketing thought has been geared toward decisions that are at best based on the dubious foundation of intuition – also known as *gut-feel* or *fly by the seat of your pants* resolutions. These types of decisions have often been based on emotional problem-solving dynamics and subjective suppositions. In attempting to make more accurate decisions, marketing professionals have utilized the method of assigning numerical values to compensate for a list of poorly defined variables. In this respect, marketing attempts to move closer to science by giving as much information as possible to decision-makers, who even then must rely on personal judgments when directing a marketing plan. In effect, this falls short when considering the resources of the Internet and alternative forms of information gathering. Marketing theory becomes debatably suspect when dealing with the costs and benefits of the decision making process and the risks and consequences of making a wrong decision (Chase and Barasch, 71). Ideally, marketing communicators and the human resources within sales departments are charged with communicating the company's message to customers, while the results of the marketing research are designed to communicate what the customer's idea of a desired product or experience should include. However, only the scientific approach of axiology can provide for a higher degree of success when evaluating what people regard as valuable.

There is little doubt that axiology provides a resource that can more accurately assess the customer's evaluation of a product or service, and it must therefore be utilized in conjunction with, or as a viable replacement for, the more costly planning and implementation required when conducting traditional marketing research. The best case scenario would start with the realization that any effort to solve a company's real world marketing problems should begin with marketing research, but it should be supported and confirmed by the scientific results of an axiological assessment that includes the use of the *resonance dynamic*.

The challenge remains to conceive of the importance of the contributions of the science of axiology to marketing professionals, and/or to companies directly. It can provide marketers with an unbiased and critical analysis for marketing planning, based on the results of axiological assessments that address what companies propose to offer in the marketplace. Axiology provides these tools to marketers in the form of targeted axiological profiles that can be structured to meet industry-specific applications and problem solving challenges. These targeted profiles clearly assess the responses of people who make judgments pertaining to value and who consequently affect every industry, business, or company pertaining to their products, services, and/or brands. The respondents to axiological assessments use both their mental and emotional capacities to arrive at decisions to engage, buy, or reject a marketer's proposition. The value of the

benefits of axiological assessments to the marketing process is clear, but how can this be integrated into the marketing thought process itself?

One answer is for axiologists to think like marketers and to take on the mission of creating a form and substance of value that the science of axiology and its results can deliver to marketing. Axiology can and should create its own value propositions to and for those professionals whose jobs are to solve marketing problems – targeting marketers and marketing departments alike. Another task is to provide the general public and consumers with a clearer picture of *what value is* as it pertains to axiology, and how it should be integrated into everyday decisions. In both cases it is important to awaken people to the importance of the very basic make-up, features, and benefits of the science of axiology.

Everyone thinks they understand value. If you conduct an Internet search for the word “value” through Google™ or some other comparable search engine, as of this writing you will determine that the concept relates to approximately some 831 million sites that cover the entire spectrum of its perceived definition and relationship to all things. It may or may not be important to note that this does not equal the estimated headcount of cows. Further, this is only a fraction of the world population, and that count is approaching 7 billion people. It is the people of the world who most need to understand value and its importance. If you were to search the Internet for the word “axiology,” you would find that in one form or another it appears in about 136,000 instances or locations. This is not to say that axiology can not reach a far greater number of people, because a single good Internet website with effective search engine optimization techniques could attract more people and visits than an ill-conceived group of millions of sites, but it arguably illustrates that axiology’s relevance and acceptance could use a boost in *the value polls* and Internet search placement. One of the most wonderful things about axiology is that it is Internet friendly. The question remains whether or not the science is remarkable enough to gain momentum in importance to the population at large and the marketers in particular. Again, the answer may literally be found one day in the milliseconds it takes to conduct an Internet search.

The substantive issue might be in the continual growth of the Internet, where many people in this day and age generally look for and receive their information. Depending on where you look, estimates are that worldwide Internet usage today is nearing 2 billion users and that soon nearly half the world’s population will have access to the Internet.

One major element driving this growth is the use of and dependence on social media. By the end of 2010, Generation Y, or “Gen Y,” will outnumber baby-boomers in America, and 96% of them have already joined a social network (Internet, YouTube). In China, 300 million users subscribe to a site similar to Facebook™ called ZONE (Internet: YouTube). *Social Media* have now overtaken pornography as the number one activity on the web (Internet: YouTube). And the growth continues to be phenomenal. Whereas it took 38 years for radio to reach 50 million users, and television 13 years, it took the Internet only 4 years and iPO™ 3 years to reach the same numbers. In terms of social media, Facebook™ added 100 million users in less than 9 months, and iPO users downloaded 1 billion applications in 9 months (Internet: YouTube). The conclusion here

is that as these forms of communication and information sources continue to explode, the value of the Internet to consumers has proven that the Internet has determined *not what is valuable, but what people regard as valuable*. People go to the Internet to learn, and value can be found in that education. In 2009, a U.S. Department of Education study revealed that online students out-performed those receiving face-to-face instruction, and 1 in 6 higher education students are enrolled in an online curriculum (Internet: [YouTube](#)). The facts and figures related to Social Media continue to be staggering, and axiology should continually consider and be involved in this growth to spread its own message, first to the previously mentioned population at large, then targeted to marketing professionals worldwide.

It may take the creative brilliance of marketing professionals who understand not only axiology, targeted assessments, and the importance of spreading the value of this validating science at its core, but who can also translate the image and notion of axiology as a brand, whose spokesperson might appear as a purple cow in a lab coat – *or something similarly remarkable*. Whatever that image or notion is perceived and presented to be, axiologists should have a marketing plan that would be something like a friendly contagious virus that can spread its message across all forms of media and attach itself to continually evolving strategies for success. One goal could be to move the needle on the number of axiological Internet searches for sites and references. The other is to insure that the vision for axiological notoriety is clear, and the persistence of its message is unending. There is a universally accepted principle that says *where there is no vision, there is no hope, and people perish*. Axiologists must continue to spread the vision, teach, and apply the science that Robert S. Hartman and his distinguished colleagues and axiologists have refined over its history, and they must use the tools of today to succeed in this endeavour.

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