



Understanding the Logic and Math of the Judgment Index™

(Answering the often asked question: “How does the Judgment Index™ achieve specific and measurable information about a person?”)

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INTRODUCTION

We are often asked about the Judgment Index™ and about "how so much meaningful and accurate information can be gained by rank ordering words and phrases." Additionally, we hear about how many of the words and phrases seem a bit odd.

It will help to understand that the creator of the basic instrument, Robert Hartman used a mathematical, logical, and scientific approach to the construction of this tool and that his life's work was nominated for a Nobel Prize in 1973, the same year in which he passed away. Most of the people and companies who use the Index on a daily basis spend very little, if any time dealing with, or worrying about the math. For them, the '**proof**' of the Index's legitimacy and validity (besides the clear and distinct, traditional validity studies that have been done under the best academic scrutiny) is in the proverbial "taste of the pudding." The Index simply works in an undeniable manner day-in and day-out. It gives accurate insight, produces measurable results, and provokes important conversations. For people who are more "results oriented" and "outcome driven," the mathematical underpinnings are not a major issue of reflection or investigation. To them, the Index is like driving a car; they may not understand how the car works, the order in which the pistons fire, or even how many pistons their car has, they just know it gets them where they want to go – it does what it is supposed to do.

However, this reflection of the majority of people's thinking about the logic and math is in no way to say that curiosity about, and a desire for at least "initial steps" of understanding are not important, especially if some degree of explanation can be made that can make sense to a broad range of people.

Five Critical Considerations before the Logic and Math

There are five areas of critical consideration that provide the context for looking at the logic and math. These five issues are the pristine issues that, left unsaid and unappreciated, make the logic and math almost beside the point. If there are not fundamental understandings and some appreciable degree of agreement on the critical points, the logic and math are supporting an almost meaningless void.

First, there must be a clear and distinct statement about what the Judgment Index™ is attempting to assess. Without this understanding and prevailing focus, not much else will make sense. Foremost, Hartman was intent on seeing human beings from the point of view of their "value systems." By this, he meant that the primary driver in human existence was not rational intelligence, emotional balance, or personality. While valuing may involve all of these elements of human existence, valuing is a higher level of human activity-so different in degree that it is different in kind and needs to be considered from new and distinctive perspectives offered by Hartman. If current research is true that as many as 82% of organizations are using some form of "personality" testing to hire, promote, and develop, the only conclusion that can be drawn is that 82% of the time only the surface of human understanding is being scratched.

But, *what* is precisely being assessed by the Index in looking at this "value system" or "package" of values? The idea of a "value system" is manifested in two, primary ways. First, there is a person's personal belief system or faith system. Clearly, who a person votes for or where a person may choose to worship is a matter of inviolable personal choice. The Index *does not*, in any way whatsoever attempt to delve into the arena of personal beliefs. Secondly, and of most importance, is the way in which a "value system" manifests itself in the **judgments** that a person makes, the way in which decisions are arrived, and the way in which matters of life are weighed out, sized up, and evaluated.

Here is the major, **first key point**: the Judgment Index™ is about assessing judgment capacity. In what is asserted as "the value structure of work," is the belief that the underlying structure of all work is a combination of competency of skill sets (an easily affirmed value) and good judgment (an overlooked, but equally affirmed value). Organizations have generally determined how to assess skill set competency very well. What the Judgment Index™ provides is the ability to clearly, accurately and measurably assess these *judgment* aspects.

Second, after the many years of working with the Judgment Index™ and with all of the additional explanations and reports that have been created, one of the most essential items in the entire Index "toolbox" is the basic, elementary "Score Sheet." This is a one-page set of numbers and abbreviations that is a treasure trove of information to the trained consultant.

The array of numbers on the Score Sheet is derived from the various combinations of the logic and math. How these numbers find their way into the different categories of explanation will be clearly outlined in the course of this report, however, before that exercise is undertaken, it is first important to see what exactly is to be found in the different categories. There are eight areas of emphasis on the "Score Sheet" and you will need to understand the important distinction that is to be made between Part 1 scores and Part 2 scores. Part 1 refers to "valuation of the external world," that which exists from our skin out, and Part 2 refers to "valuation of the internal world" or the "Self," that which exists from the skin in. It is helpful to think about Part 1 as being "work-side" scores and Part 2 as "self-side" scores.



JUDGMENT INDEX™ SCORE SHEET

Name: Sample Index

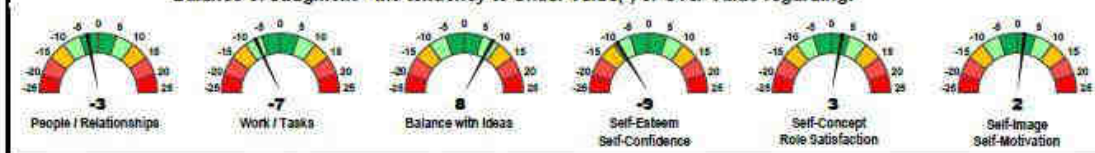
PRIMARY JUDGMENT INDICATORS



PART 1		WORK SIDE (WHAT YOU DO)					Your Score
Measure of Capacity for:		Development!	Development	Attention	Good	Strong	
1. Noticing, General Sensitivity	DIF40						More Intuitive
2. Tolerance of Others & Ideas	DIM411						More Open-Minded
3. Trainability	DIM411						Quick to Learn
4. Strategic - Conceptual	DIM416						More Strategic
5. Conceptual Clarity	DIM414						Strong Clarity
6. Realism - Idealism	DIM436						Idealistic
7. Relational Skills, Empathy	INT46						Engaged
8. Dependability, Reliability	INT42						Strong
9. Strategic - Actual	INT48						Strong
10. Problem-Solving Ability	INT46						Effective Decisions
11. Difficult People & Situations	INT40						More Energy / Innovation
12. Focus and Concentration	DIF4						Highly Focused
13. Following Directions	DIF2						Follows Precisely
14. Stress, Coping, Attitude	AT453						Low Stress
15. Validity, Consistency	RHO440						High

PART 2		SELF SIDE (WHO YOU ARE)					Your Score
Measure of Capacity for:		Development!	Development	Attention	Good	Strong	
1. Self-Regard & Self-Care	DIF46						Self-Care
2. Meaningfulness of Work	DIM49						More Fulfilling
3. Value of Work / Morale	DIM425						Positive Work Value
4. Organizational Ability	DIM412						Compulsive
5. Concept Balance	DIM429						Strong
6. Role Identity	DIM453						What You Do
7. Solving Personal Problems	INT44						Independent
8. Solving Practical Problems	INT413						Independent
9. Care of Surroundings	INT43						Conscientious
10. Clear on What is Important	INT40						Focuses on Important
11. Self-Criticism, Hard on Self	INT443						Healthy Perspective
12. Assertiveness	DIF4						Assertive
13. General Moral Clarity	DIF2						Well Developed
14. Stress, Coping, Attitude	AT454						Low Stress
15. Validity, Consistency	RHO412						High

Balance of Judgment - the tendency to Under Value(-) or Over Value regarding:



PRIMARY Judgment Type = (4) Counseling/Coaching/Mentoring

Tends to view self as UNIQUE. (Part 2 IES = 13, 38, 15)

P1:IES:17,13,26 DIFQ:86 VQ1:72 VQ2:32 P2:IES:13,38,15 (3A7B4T15)

To the extent that a person can look at the "Score Sheet" and understand the basic arrangement of the various scores and what each section of the "Score Sheet" is trying to accomplish, how the actual numbers fit into the scheme will be more meaningful. As will be seen, certain numbers will influence and play off of each other. Other numbers will be breakdowns of larger classes of numbers. The Part 1 numbers are driven by the ordering of items on the first part of the assessment instrument entered by the participant. The Part 2 numbers are driven by the ordering of phrases entered on the second part of the instrument. The balance indicators are similarly driven.

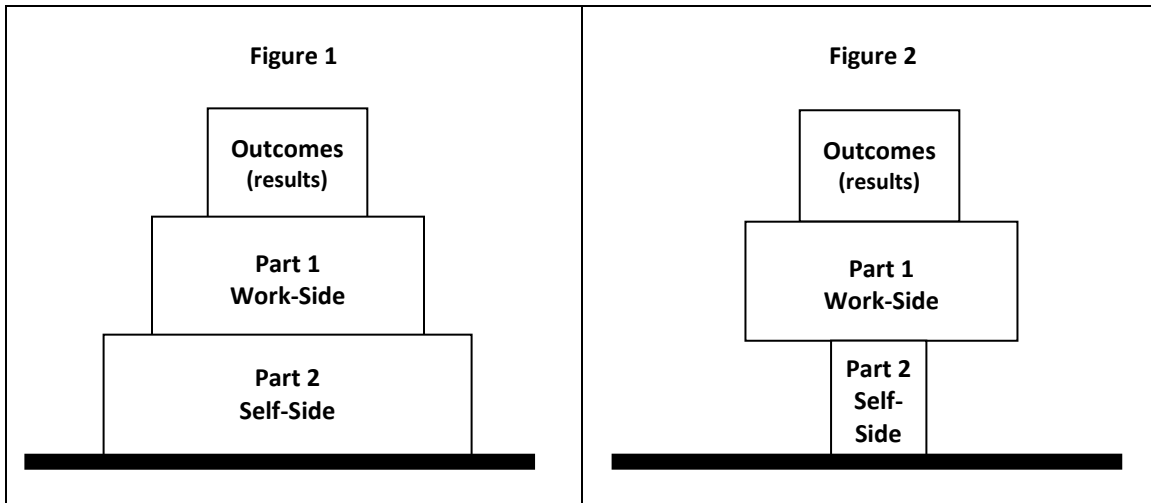
The "Primary Judgment Indicators" scores found at the top of the "Score Sheet" are driven by Part 1 scores alone, as is the "Primary Judgment Type" at the bottom of the "Score Sheet" in the grey background box. The "Summary" scores (shown in fine print at the very bottom right hand side of the "Score Sheet") are obtained from Part 1 and Part 2 scores used both unilaterally and in combination with each other.

Third, it is critical to always keep in mind that a "value system" or "value package" has "value tendencies." These "tendencies" are not to be compared like scores in a football game, and no "tendency" is any better than any other. They ultimately complement each other, and are all necessary in individuals and groups if there is to be balance in evaluative capacity. These "tendencies" are a further "mirror" of a person's or group's uniqueness. It is important to be absolutely fluent with the lettering I, E, and S. These letters, which fill the Index's interpretation, are the three, primary evaluative capacities expressed in the following manner:

- "I" = **Intrinsic** – people skills, the capacity for relational judgment, the capacity to evaluate and relate to people expressed by acute understanding of interpersonal interactions, care and compassion, and the ability to impress, motivate, and lead.
- "E" = **Extrinsic** – task and process orientation, the capacity for understanding and accomplishing work, the general sense of "work ethic."
- "S" = **Systemic** – the capacity to relate to "big picture" strategic realities and abstractions, the capacity to see implications and consequences, the ability to see beyond immediate pressing realities and recognize integrative patterns and infrastructures.

Continuously, the numbers in the math will be related to I, E, and S dimensions of judgment, and the above, basic definitions will apply. No one dimension is more important than the other, and the most effective decision-making will involve a balance of the three areas. There are ways in which the Systemic can be seen as most important in the sense that integrative overviews are always distinctive. But, if pressed, Hartman felt that the higher that a person moved into more important responsibilities of leadership, the more important the Intrinsic became since decisions were more and more fraught with moral, ethical, and human issues.

Fourth, it is important to always keep in mind both the juxtaposition and the interrelationship between the Part 1 and the Part 2 scores. The best way graphically of explaining the relationship between the work-side and the self-side scores is what we call the "wedding cake" model. In this graphic demonstration there are two, three-tiered wedding cakes:



The point of these graphics is to display the important relationship that exists between the Part 1 and Part 2 scores. It is obvious that the "wedding cake" in Figure 1 looks much more stable than the one in Figure 2. The Figure 2 cake looks unstable and capable of falling over because the bottom tier is not sufficiently strong. The top tier represents "outcomes," and these may be behavioral, performance, or attitude "outcomes." This is what is seen outwardly manifested in terms of a person's work performance and attitudinal behaviors.

In every sense, these "outcomes" will be supported by strong work-side judgment capacities, and these need to be as strong as they can be. This is the arena of judgment that supports skill-set competency in the "value structure of work" noted above. Again, the work-side is of high value, and you would want to have the strongest scores in this area as possible.

However, in almost five decades of analysis, 93% of the time the self-side scores will be weaker than the work-side scores. This phenomenon is what is represented in Figure 2, and the vulnerability attached to weaker self-side scores is graphically evident. In every case, it would be better and more advantageous to have strong work-side scores that are supported by even stronger self-side scores. The result and degree of weaker self-side numbers mean the lower potential of the work-side judgment that will be realized. *While most people will have Part 1, work judgment scores that can be strengthened, the greatest arena of growth and development is on the Part 2, self-side. Ironically, by giving attention to the self-side, it will make the potential that is realized on the work-side even greater.*

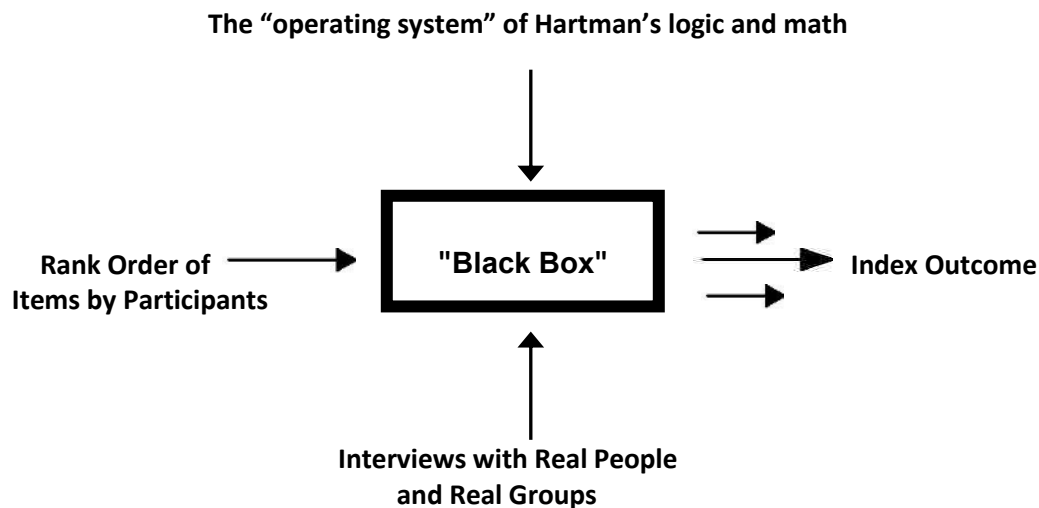
Fifth, and finally, there are the continually asked questions about the Index, "How do you get so much accurate information by assigning values to these two sets of eighteen items?", usually followed by something such as, "What's in the 'little black box'?" These questions are important and very understandable, yet there really is no mystery involved.

The final interpretation is driven by three elements. First, there is **the order** in which a person arranged the different words and phrases of Part 1 and Part 2. Why a person prioritizes in the way he/she does is determined by what is important to the person at that time in their life. Change the priority and arrangement, and the outcome in the interpretation will be impacted.

The second driving element is the **logic and math** of the Judgment Index™. This is what is now going to be explained in greater detail. However, and this is a powerful point: this logic and math is not, in itself, the key element. The logic and math, very highly derived in a self-conscious and strategic manner, is simply the "operating system" that processes the ordering entered by the participant and which produces the numbers found on the "Score Sheet" and other related reports. As an "operating system", it has functional and instrumental value that is necessary for the process to occur, but it is not valuable in and of itself. It is valuable as a "means to an end," not as an end in itself. The logic and math simply become numbers that are driven by the rank order of items a person establishes.

The third driver and most key in the Index's interpretation is the way that the **meaning** of the numbers has become more "accurate" and "truthful" over the years by the emphasis and highly refined focus placed on interviews and direct experiences with real individuals and groups who have taken the Index. The experiences and responses of real individuals and groups who have confirmed both individually and corporately what numbers consistently and accurately mean is what gives the Index its present—and continuing now—veracity or "**truth value**." Take away the confirming thousands and thousands of interviews and direct experiences with real people and groups, and all you have are numbers and a few general—if not presumptory—concepts. In Hartman's words, these concepts would be very "lean," and any confidence in the Index correspondingly so. Add to Hartman's initial, "lean" concepts, five decades of concentrated contact with real individuals and real groups, and the concepts that surround the various numbers become exceedingly "rich." The reliability and insight of the Index results become meaningful and revealing. In other words, the accuracy and insightfulness of the Index is not so much dependent on the "operating system" and initial, conceptual insights of Hartman that took place in the 1960s, but on the **monumental** accumulation of work that has built on and added to this framework over five decades. In this sense, as time stretches forward and the interview/experience process continues to have emphasis, the Index will only become more accurate, more insightful, and truer.

The following graphic makes the point of this final, fifth discussion and explanation:



THE FIRST STAGE OF MOVEMENT TOWARD LOGIC AND MATH

In order to move toward actual numbers and their interactions, there must first be a clear understanding of the interactions that exist between the **Intrinsic, Extrinsic, and Systemic** domains of judgment. The logic and math is built on a system of "parallels" that are driven by the interactions relating to these three domains or modes of judgment. This section represents the advent of Hartman's philosophical orientation to the Index and drives how the logic and math will attempt to be used. This is the framework of philosophical assumption that will determine the direction that the logic and math will give numerical expression.

It may even be important at this point to stop and ask the question: "What does it mean to value?" The words value, valuation, valuing, and evaluation all are an attempt to convey and describe a process rather than some fixed "reality." In fact, there is never "fixed reality." "Reality" is always in process such as in Heraclitus' ontological ideas that existence is always "becoming" and never fixed "being." As he described in his leading metaphor, we never "step in the same river twice." So, these "value" words should always be seen in their verbal force not in their noun force. Even "values" — a word that certainly looks like a noun — for a healthy and mature person will always be in process in the sense that they may be refined by the next experience that occurs in real life. You can see this in the "situation ethics" of Joseph Fletcher and the "teleological ethics" of Aristotle.

When these "value" words are used, think of them as a conscious and strategic "**process of engagement**" that is taking place between a person and some event, object, or other person. As example, if the driver of a car begins to near an interstate exit ramp and sees that traffic is gridlocked in all directions, there is a conscious and strategic "process of engagement" that takes place. First, there is a consideration of the overall situation, which is based in part on every traffic jam situation in which that person has been stuck in their life, had described to them, read about, etc. This consideration takes place in the context of their concept for "traffic jam-ness" that will either be "rich" or "lean" depending on the degree, amount, and intensity of information that they have gained in their life about traffic jams; or, the degree, amount, and intensity to which "traffic jam-ness" has become "in-formed" within their consciousness, awareness and memory.

The word *consideration* is the first movement of evaluative consciousness, value awareness, and the first movement of this "**process of engagement**". The word has ancient roots that lead back to the word "sider" that means "wisdom." In other words, "to consider" literally means to "move forward with wisdom." As it is being used here, *wisdom* is the active force of the arena of valuing/valuation like *thinking* is the active force of more purely cognitive and rational engagement.

The next movement of this "**process of engagement**" is *decision*. The final movement will be action — what one actually does to respond to the traffic jam. In some respect, even in this most mundane circumstance — unless one is running late for their daughter's dance recital, etc. — the interplay of Intrinsic (the experience of existential angst when first observing the gridlocked traffic), Systemic (the conceptual overview of possible options), and the Extrinsic (how a person actually decides to mechanically drive their car) is fairly obvious.

In a moment of profound insight, Hartman wrote about this phenomenon that is called the **"process of engagement"**:

The more one becomes involved in the object, the more properties one becomes aware of, the richer the concept of the thing, and hence, the more valuable it becomes to the person. The more properties one becomes aware of, the more one knows about the object. Cognition and valuation are identical; the degree of cognition is the degree of valuation. ("The Value Structure of Creativity," p. 262.)

Now, to become more "technical," it is fairly easy to see as a first detailed step toward the logic and math how the three types of value experiences and evaluative modalities operate in regard to various objects, events, or people.

The following looks at different objects of valuation.

Systemic	Extrinsic	Intrinsic
1. $A = L \times W$	1. A house	1. My home
2. Wood	2. A baseball bat	2. The bat that Yogi Berra signed for me
3. The law of gravity	3. An apple falling from a tree	3. Newton's "aha experience" that creates the law
4. NaCl	4. Table salt	4. Lot's wife
5. A rope	5. A noose	5. A lynching or a suicide
6. A computer translation of a poem from one language to another	6. A paraphrase of a poem in prose	6. The poem as it "unveils" itself in the moment of poetic inspiration
7. A genealogy	7. The family tree of an Italian family	7. "The Sopranos"
8. Lucy as a numerical entry in a census survey	8. Lucy as a woman	8. "Lucy in the Sky with Diamonds" - Beatles song

Any of these items could be related to in a much more complex manner and, in doing so, reveal again the intricacies of value consciousness or evaluative awareness. "Lucy in the Sky with Diamonds" was clearly Intrinsic in its initial creation and inspiration. It became quite Systemic as the scores were written for its performance, and it was reduced to notes on a scale on a page of music. It may also have become very Extrinsic as the music was actually played or the royalties earned and tabulated. Additionally, there were likely times for the Beatles and their audiences that the Extrinsic and Systemic elements that allowed the song to be performed became quite Intrinsic. It may conceivably have even been an Intrinsic experience and of Intrinsic value when the royalty check arrived and was deposited in the bank. The more that existence is looked at through the lens of this Intrinsic, Extrinsic, Systemic modality, the richer the texture and depth of life that is observed.

A similar table of information allows the above points to be extended in a more formal manner. The following table will look at different aspects valuation.

Aspect of Valuation	Systemic	Extrinsic	Intrinsic
1. Property of entities	1. Entities with a finite number of properties	1. Entities with a denumerable infinity of properties	1. Entities non-denumerable infinity of properties
2. Valuing attitude	2. Objective and psychologically detached	2. Everyday interestedness	2. Intimate, empathetic identifying
3. Complexity of valuation	3. One dimensional: perfect or no value at all	3. Multi-dimensional: based on number of properties that are present—good, bad, fair, average, etc.	3. Quantum dimension of that which is unique
4. Types of concepts	4. Logical constructs axioms, formulas	4. Analytical, class, empirical concepts	4. Metaphors and proper names
5. Type of language	5. Technical	5. Prose	5. Poetry

At this point, hints of logic and math begin to appear. Look for example at the entry under Extrinsic in number three above. In terms of extrinsic goodness, something is good if it has all of its properties or parts when extrinsic valuation is taking place. A car, for example, would not be a "good" car extrinsically if it did not have wheels. On the other hand, if that was all that was missing, and since wheels are something that can be easily replaced, it certainly would not be a "bad" car. So, in Hartman's math, something is "good" extrinsically if it has all of its properties/parts (N). It is "better than average" if it has more than half of its properties/parts ($N/2+1$), "fair" if it has exactly one-half of its properties/parts ($N/2$), "less than average" if it has less than half of its properties/parts ($N/2-1$), and "bad" if it has radically less than half or none of its properties/parts.

Another aspect of mathematics is suggested in the language in entry number one above. The terminology "finite," "denumerable infinity," and "non-denumerable infinity" rise from the fascination that Hartman had with transfinite mathematics and the work of Georg Cantor.

[Georg Ferdinand Ludwig Philipp Cantor, b. Mar. 3, 1845, d. Jan. 6, 1918, was a Russian-born German mathematician best known as the creator of SET THEORY and for his discovery of the transfinite numbers. He also advanced the study of trigonometric series, was the first to prove the non-denumerability of the real numbers, and made significant contributions to dimension theory. Cantor received his doctorate in 1867 and accepted a position at the University of Halle in 1869, where he remained.]

Hartman said in *The Structure of Value*:

Some experiences often appear intolerable, for they seem to burst the limited human frame. On the other hand, knowing the hierarchy of intrinsic values and its transfinite symbolism of alephs, which does heap infinities in a rational pattern, seems to confirm a natural disposition of the human spirit toward experience of ever heightened awareness and consciousness. Thus, we find in Cantor's work the most rigidly exact in science applied to the shadow and spirituality of the most intangible in speculation. (SV, p. 224)

To understand the computations in the Index itself, it is vital to see the way in which one factor or another of valuation can impact particular objects of valuation. Seeing these relationships is absolutely critical to understanding how the Index scoring works.

Hartman gives tremendous emphasis to the way in which human beings, in their value system, can create "compositions" and "transpositions." These two realities, in most respects, describe the movements of value consciousness or evaluative awareness. A "composition" occurs when a person overvalues some object or situation of valuation. A "transposition" occurs when there is undervaluing. There can be dis-valuing and diminishing valuation, or there can be enhancing or "elevating" that takes place in the valuing process. In addition, any "adding" or "subtracting" of value can occur in degrees, ranging from minor impacts to major impacts.

In every real-life situation, we as human beings have the chance to overvalue or undervalue, and to do this to minor or major degrees. To the extent that our value systems are strong and consistent, we will not do this. To the extent that our value systems are out of balance and inconsistent – weak – our overvaluing and undervaluing can go to extremes. Hartman believes that this process of overvaluing/undervaluing and thus the "health" of a person's value system can be measured. What can be seen across the years is that certain "patterns" of valuation can relate to certain behavioral, attitudinal, and performance outcomes – certain "life outcomes." These patterns can be so strong at times that those certain insights, including predictive insights, are possible. In addition, with over four decades of results and interviews, it begins to be apparent that certain "patterns" relate to certain work settings and job types.

So, it would be possible to take some Intrinsic reality "I" and value it in a positive direction intrinsically, extrinsically, or systemically. In doing so, the following symbolic patterns would be produced: I^I , I^E , or I^S . It would also be possible to take some Intrinsic reality "I" and value it in a negative direction intrinsically, extrinsically, or systemically. In doing this, a different set of symbolic patterns would be produced: I_I , I_E , or I_S . The same could be done with some Extrinsic or some Systemic reality, either positively or negatively, and the following symbols would be generated: E^I , E^E , E^S , S^I , S^E , S^S , or correspondingly E_I , E_E , E_S , S_I , S_E , S_S . *Note very, very carefully at this point that in all of the different symbolic options relating to the interplay of the valuing options and valuing objects, that **18** different possibilities have been generated.* Those who are familiar with the Judgment Index™ also know that there are **18** elements on both Part 1 and Part 2 of the instrument. An understanding of these interrelationships provides insight into how the instrument was constructed.

In a final demonstration of what takes place when an object or circumstance of valuation is evaluated in a variety of different ways and by observing the development of these ideas, it will then be possible to understand the construction of the Index itself.

Category	Relationship	Example
Time	S^S	Duration/interval between two points in time
	S^E	Duration/internal between two points as marked by the progression of the hands of a clock
	S^I	Duration/one's lifetime
	E^S	Week/7days
	E^E	Week/April 1, 1957-April 8, 1957
	E^I	Week/a week of vacation at the beach
	I^S	Honeymoon/period of time following a wedding
	I^E	Honeymoon/the time the bridal suite is rented by the owner of a resort
	I^I	Honeymoon/the experience of the new bride and groom; my honeymoon
Space	S^S	Area=Length x Width/a township in Colonial America=1 square mile
	S^E	Area=Length x Width/Jamestown, Boonesborough
	S^I	Area=Length x Width/my hometown
	E^S	USA/3,000,000 square miles
	E^E	USA/a nation in the Western hemisphere
	E^I	USA/"this is my country, land that I love"
	I^S	Space per person/proportion of this planet allotted on average to each human being
	I^E	Space per person/the square footage of my home and the acreage of my property
	I^I	Space per person/my "private" space; elbow room
Causality	S^S	Cause-effect/for every action there is a reaction
	S^E	Cause-effect/the striking of a ball with a bat
	S^I	Cause-effect/Hank Aaron's homerun that broke Babe Ruth's record
	E^S	Entropy/the law of heat diffusion and transference
	E^E	Entropy/the burning out of a star
	E^I	Entropy/the burning out of the sun to people on the earth
	I^S	Deity/divine being as understood by a student in a class on comparative religion
	I^E	Deity/Yahweh, Shiva, Ra, Jehovah
	I^I	Deity/a personal relationship with God experienced in worship, meditation, or something like Kant's "category imperative" to moral acts

Take note in these configurations that certain objects or circumstances are valued in particular valuing processes. In this manner, objects or circumstances take on different degrees (mathematics) of intensity, meaning, worth, and priority. Note the movement of intensifications and additions that occurs in each category. Under causality, cause-effect is a Systemic reality that is valued systemically, then extrinsically, and then intrinsically. Then, there is a concrete, practical example of causality, entropy, and this concrete law of causality is considered systemically, extrinsically, and finally intrinsic. Eventually, we then work our way to an Intrinsic form of causality, deity, and this reality can be seen systemically, extrinsically, and intrinsically.

The arrangement in all three categories of consideration is laid out in a very precise and noted manner. The "progression" in valuing intensity from one item to the next is very clear and orderly. The value consciousness and evaluative awareness that is expressed in the movement from S^5 to I^1 is consistent, logical, rational, and orderly. Notice, that in each of the categories of consideration there are nine items. These nine items are all "compositions," and there is a pattern of "composition" that moves from S^5 to I^1 . There are **9** items in each list, not **18**. The lists, because this is only constructing an explanation here, could have started with I_1 a "transposition" or ending with I_1 depending on the direction of the construction, and then there would have been **18** items just like the Judgment Index™. As can be seen and will be seen with greater clarity, the **18** items of the Judgment Index™ include every possibility in both Part 1 and Part 2 of every combination from I^1 on the most positive end of the spectrum of evaluative choices to I_1 on the most negative end of the spectrum of evaluative choices.

Now, imagine for a moment that we had taken any one of the above three categories, removed the I, E, and S indicators, jumbled the nine items in the category, and then asked that the values be rightly ordered to mirror the patterns noted above. To the extent that a person could replicate the patterns as they are printed above, you could conclude that the person's evaluative consciousness or value awareness was highly astute. And since the person had done so well with this process of prioritizing, it would be likely that prioritizing judgment in general was astute. If a person radically confused the order so that little of the above patterns were replicated, then a different set of conclusions could be drawn about the person's capacity for strong valuing judgment. In essence, the items on the Judgment Index™ in both Part 1 and Part 2 are a jumble of 9 compositions and 9 transpositions. The task challenged by the Index is to create an appropriately ordered arrangement of words/phrases from the top position on the list, the I^1 item, the most pronounced composition – through the bottom position, the I_1 item, the most pronounced transposition. The closer that scoring mirrors Hartman's ideal arrangement, the better the score will be. The greater the distance of disagreement with Hartman's ideal arrangement, the weaker the score will be.

Finally, keep in mind that there are no wrong or right answers in the scoring, and there is nothing magical about the words and phrases chosen by Hartman. To a certain extent, although there would need to be the addition of the transpositions, Hartman could have used items like the ones put together in the last graphic list. Hartman is not being arbitrary about words and phrases, but he is very precise about making sure that every possibility from I^1 (the number 1 position) to I_1 (the bottom position) is used.

The issue at this point is not whether a person agrees or disagrees with Hartman's paradigm. In this sense, there are no "right" or "wrong" answers. The issue is that Hartman has laid down a

logical and orderly arrangement of valuing that encompasses the logical movement from I' on the most positive end to I₁ on the most negative end. To the extent that a person mirrors this logical and orderly arrangement, there is a logic and orderliness to that person's valuing processes. To make choices and priorities that do not align with Hartman's paradigm does not make a person a "bad" person, but it does create a commentary and interpretation on the person's valuing system. There is to one degree or another a "confusion" or "lack of confusion" in a person's valuing system, a lack of "logic" and "orderliness" in a person's valuing system depending on the difference created with Hartman's paradigm. It is a paradigm, not the paradigm, and therefore is not sacred or sacrosanct in and of itself. ***The paradigm is the beginning point to which the thousands and thousands of interviews added confirmation, affirmation, and credibility.***

CONCLUSION

In no sense is there some kind of strange "code" that has been broken. Instead, some of the fascination of how the Judgment Index™ *works* from a logical and mathematical perspective should now be better understood and in fact should remove a great deal of its "mystery".

The emphasis on compositions and transpositions in a person's valuing system can be seen as relating directly to the psychometric construction of the profiling instrument itself. The psychometrics, although not well known to most readers or interpreters, is a fairly basic, technical test of construction dynamics. The way that a person scores based on divergence from an established "logical norm" is fairly traditional test-construction in psychometrics. The way that Hartman constructed the 18 movements of value consciousness from I' through I₁ is absolutely and unequivocally filled with genius. The way that test-making could relate composition and transposition to calculable divergence was not all that difficult for a skilled person in test construction like Hartman used. The power of the model of Einstein's relativity theory allows for 12.8 quadrillion (12,800,000,000,000,000) potential different outcomes of each Index. Every score on each part of the Index impacts every other score. One score is made relative by a multitude of variables just like "real life." It becomes powerfully clear that the uniqueness of a person is being sought. No attempt to construct a "box" of right and wrong answers into which a person must be fitted or by which a person will be judged was ever the intent.

The "Black Box" metaphor noted earlier remains critical. The two sets of 18 items on the Index can now be understood as a "logic" hierarchy of valuation. You may not agree with Hartman's words or phrases. You might have chosen different words or phrases. However, he does succeed in covering all the bases of consideration in the "logic" hierarchy. The "operating system" of the psychometric test construction based on divergence from a "logical norm" should now be understood. It is impressive in the way that the psychometrics are able to so closely assess the movements of a person's individual valuing by being able to calculate the degree of composition or transposition that takes place. Again, any score that is achieved is not a sign of a person being a good or bad person. The interpretation derived is an indication of the degree and kind of movement that the individual value system is taking in relationship to the "logical norm."



Finally, it must be stressed again, that the key element of credibility and power of the Judgment Index™ is the **endless, endless** range of individual and group interviews and very specific conversations that have been designed to match scores with real-life experiences, real-life attitudes, and real-life performance. The "logical norms" and the psychometric test construction must both be as well-conceived, paralleled to each other, and precise as they can possibly be. The interviewing must be sensitive and unrelenting, ever listening and ever willing to learn from real people in real-life situations. When the combination of these three, integrated elements is achieved at a high level of "connectivity," the Index results will have credibility and power. Those who have experienced the assessment often share that they feel a spotlight has been turned on their souls, and they will ask, "How did this instrument know so much about me, things that my closest friends did not even know?"

By incorporating the Judgment Index™ into a setting, profound dialogues will be established and enhanced group dynamics will result in stronger results. The Judgment Index™ will become a **useful tool** it will augment personal and group decision-making in striking and even memorable ways.

The Judgment Index™ is a proven instrument in making real and significant differences in people, companies, organizations, relationships, and lives. It has proven itself in returning to the bottom line gains of 4 to 15 times the investment. It cuts through the clutter and diversions in the hiring interview process to reveal the true individual. It shows companies why their best performers are best performers and allows them to create hiring and development models to that highest standard. The assessment is predictive of performance.

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