

JOURNAL OF FORMAL AXIOLOGY: THEORY AND PRACTICE

Volume 2, 2009



“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

A Publication of
The Robert S. Hartman Institute

The Journal of Formal Axiology: Theory and Practice
Vol. 2, Summer of 2009

CONTENTS

Rem B. Edwards, <i>Editor's Page: Is Axiology a Science?</i>	1
Kevin Wolfe, <i>The Axiological Roots of Employee Engagement</i>	3
Stephen C. Byrum, <i>Exploring the Important Power of Focus</i>	15
Jay Niblick, <i>The Role of Axiological Self-Awareness in Peak Performance</i>	25
K. T. Connor, <i>Innovation: An Axiological and OD Exploration</i>	41
Bill Pavelich, <i>Axiological Intervention with Christian Leaders: Two Case Studies</i>	55
Cliff Hurst, <i>A Meaningful Score: Hartman v. Rokeach</i>	79
Thomas M. Dicken, <i>Intrinsic Value and Some of Its Alternatives</i>	97
David Mefford, <i>Formal Axiology, Philosophy or Science?</i>	111
James C. Weller, <i>Why Not Fractal Geometry?</i>	131
Rem B. Edwards, <i>Transfinite Mathematics, and Axiology as a Future Science</i>	147

A MEANINGFUL SCORE: HARTMAN V. ROKEACH

Cliff Hurst

CLIFF HURST is an organization development (OD) consultant, an active member of the Hartman Institute, and a PhD student in the field of Human and Organization Development at Fielding Graduate University. He wishes to thank his faculty assessor, Miguel Guilarte, Ph.D., whose guidance gave impetus for this article. The author delivered a presentation on the same subject at the annual meeting of the Hartman Institute held in Cuernavaca, Mexico in October, 2008, and thanks those in attendance for their feedback. Their warm response further encouraged the writing of this article. Cliff can be reached via e-mail to: cliff@careerimpact.net or by telephone at: 1-800-813-8105.

Abstract

Robert S. Hartman and Milton Rokeach were contemporaries. Each espoused a theory of values, and each developed a value profile based on his theory. Their value instruments each require the respondent to stack-rank eighteen items twice. On the surface, their work was very similar, but there the similarities end. This article compares and contrasts their value theories and their value instruments. Each approach has merits and limitations.

In Chapter Ten of his book, *The Knowledge of Good*, Hartman launches a broadside at the social science methods generally practiced in his day. The author of this article interprets Rokeach's work as prototypical of the generally accepted social science practices against which Hartman railed. This comparison serves as an aid to comprehending Hartman's argument as espoused in Chapter Ten.

At the time that Rokeach and Hartman lived and wrote, positivism held sway over the methodologies of the social sciences. It is little wonder, then, that approaches such as Rokeach's rose to prominence. In the years since, this has changed. The social sciences have opened themselves to other ways of validating truth claims. Ironically, it may be that the "science" advocated by Hartman will find a friendlier audience among post-positivists than it did among empirical researchers of his own time.

1. Introduction

In Chapter Ten of *The Knowledge of Good: A Critique of Axiological Reason*, Robert S. Hartman cogently argued in favor of value *science* as opposed to value *philosophy*. He lamented that previous value philosophy caused the "pseudo-scientific confusion of today's social science disciplines" (310) and the "fictitious scalability" imposed upon phenomena by researchers (Hartman, 2002, 312).

Hartman's argument in Chapter Ten is as difficult to grasp as it is broad in its sweep. I became intrigued by Hartman's argument while undertaking a course

as part of my doctoral studies in which I compared and contrasted Hartman's work with another well-known American value theorist of his time—Milton Rokeach (1960; 1972; 1973; 1979).

As a consequence of that study, I have come to view Rokeach's approach as being prototypical of mainstream social science research. It is Rokeach's type of approach to research that Hartman critiques. By contrasting Rokeach's value theory and value profile with Hartman's own, I propose to help readers digest more fully the radical stance that Hartman takes in Chapter Ten of *The Knowledge of Good* (2002).

2. Hartman's Critique of Social Science Methodologies

Hartman first outlined his theory of formal axiology in *The Structure of Value* (1967). He later elaborated his thinking in his book, *The Knowledge of Good: A Critique of Axiological Reason* (2002). This book's sub-title was an intentional nod to Kant's *Critique of Pure Reason*. Hartman wrote of Kant that he "had the double task of any pioneer in a new science: to construct the new science, and in the light of it, to criticize preceding philosophies" (Hartman, 2002, 3). In *The Knowledge of Good*, Hartman criticized preceding philosophies in light of his own theory of formal axiology. He devoted Chapter Ten to a critique of common methods of measuring value.

In Chapter Ten, Hartman most fully spelled out the fundamental differences between his approach to value science and that of mainstream social sciences, which, to me, are exemplified by Rokeach. In that chapter, Hartman took square aim at widely accepted, positivist, empirical social science as practiced in the middle of the 20th century. Although he made no mention of Rokeach, Rokeach's methodology is clearly the sort to which he was referring.

Hartman's argument is complex and incomplete. Hartman died before he finished articulating his theory of formal axiology. He never did write a summation of his thoughts on the topic. According to Arthur Ellis, the editor of Hartman's autobiography, published posthumously, Hartman did make references in his personal notes to a book he planned to write, to be titled *Principia Axiometrica*, but he never got very far with it (Hartman, 1994, 193). Scholars of Hartman's work continue today to debate the meaning and the merits of his theories (Dicken and Edwards, 2001, 125).

Hartman's disagreement with mainstream social science hinges first upon the commonly accepted use of the term *norms*. The widely used definition of norms as "the most frequent occurrence of a phenomenon" is, according to Hartman, unscientific. By extension, Hartman also called into question the analytical tools developed within the field of empirical social sciences for the analysis of observed phenomena, based as they are on statistical measures of "central tendency." Rokeach, as we will see, builds his research entirely upon a foundation that uses just this sort of quantitative analysis.

Second, most social science research builds upon data abstracted from sensory phenomena. Hartman argued that the only acceptable foundation for a science of value is to build upon synthetic concepts.

Hartman further argued that mainstream social scientists inappropriately use numerical measurements in their work. He referred to this practice as *numerology*.

Hartman then argued that many social scientists apply experiments prematurely, basing them not on axioms of value, but on summaries of people's preferences and likings. This, he referred to as *empiriology*; it is not to be mistaken, he claimed, for empirical science. Given that Rokeach specifically defined values as preferences, and that he ranked people's values according to their most frequent occurrence, Hartman would fault Rokeach on both of these arguments. In Hartman's words:

It is as if Galileo tried to discover the laws of motion by sending questionnaires to moving people about their sensations, then statistically 'evaluated' them, and offered his results as the 'laws of motion' (Hartman, 2002, 312).

3. One Area of Agreement

Although there are many differences between their approaches to the study of values, Rokeach and Hartman would both agree that values can and ought to be studied, assayed, and taught. For both theorists, the study of values matters. It matters for reasons that Rokeach gave.

The value concept, more than any other, should occupy a central position across all social sciences—sociology, anthropology, psychology, psychiatry, political science, education, economics, and history. More than any other concept, it is an intervening variable that shows promise of being able to unify the apparently diverse interests of all the sciences concerned with human behavior (Rokeach, 1973, 3).

It matters for slightly different reasons described by Hartman.

For the first time, I feel, scientific knowledge and mastery of physical nature can be matched by scientific knowledge and mastery of our moral nature. Natural science has changed the world; value science, too, once it is known, developed, and applied, is bound to change the world... What follows, then, is an attempt to de-mystify, and sensitize, to make the vague, the intuitive, and the chaotic in the world of human values intellectually clear, to show how formal axiology can lead to awareness of the several worlds we live in, to suggest a meaningful score for what could be a harmony of human life (Hartman, 1994, 58).

I agree with both theorists about the importance of the study of values in the social sciences. Consequently, this paper reflects my own attempts to comprehend what it takes to create “a meaningful score” in the world of value theory and value measurement.

4. Two Theorists Passing in the Night

Like two ships passing in the night, Hartman (1910-1973) and Rokeach (1918-1988) seemed never to notice each other. They researched and wrote prolifically on the same subject during overlapping decades, but as far as I can find, neither ever referenced the other in his own work. Perhaps the fields of social psychology and philosophy were, or are, so far removed from each other that cross-fertilization of ideas rarely took place.

The work of Rokeach is more widely known and cited than is Hartman's. A Google Scholar search uncovered five times as many citations of *Milton Rokeach* than of *Robert S. Hartman*. Perhaps this reflects the relative popularity of psychology over philosophy in the social sciences today. Perhaps it reflects the weight of the contribution to their respective fields that each theorist made. One result of my comparative studies of their work is my conclusion that Hartman's contribution to thought in all of the social sciences is under-recognized today and merits greater attention.

Hartman and Rokeach each developed a value survey. At first glance, the two surveys are very similar. Each consists of two sets of eighteen words or phrases. In each survey, the respondent's task is to stack-rank those eighteen words or phrases according to instructions such as “from most important to least important,” or “from best to worst.”

However, the similarities end there at the surface. The purposes of each survey, the rationales behind the selection of words and phrases used, the norms against which responses are compared, and the interpretations of the results, differ markedly. Even their definition of “values” is different. In fact, those differences aren't just between Hartman and Rokeach. Across the literature, there is a certain muddiness in the definitions of “values” among many modern value theorists. It is as though theorists are writing about very different things when they discuss values. It all gets quite confusing.

5. Definitions of “Value”

I take some solace from the realization that I am not alone in my confusion about the meaning of “value.” Grimm, in introducing his audio course on *Questions of Value*, admits: “Let me tell you honestly—I can't give you a good definition of value” (Grimm, 2005). Rokeach, too, wrote, “There is as yet little consensus about exactly what we mean when we speak of a belief, an attitude, a value, a value system—and exactly what the differences are among the concepts” (Rokeach, 1972, x). Hartman

added, “The reason for this confusing variety of views on values is that nobody really knows what values are” (Hartman, 2002, 14).

In Chapter One of *The Nature of Human Values* (1973), Rokeach devoted nineteen pages to attempting to define what is meant by “values.” He first distinguished between theorists who define “values” as something inherent in an object and those who define “values” as a concept held by a person. Rokeach embraced the latter definition. By this, he meant that values are the criteria or standards by which evaluations are made. This distinction leads to Rokeach’s own definition of “value.”

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. A value system is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance (Rokeach, 1973, p. 5).

Several elements of this definition are important to note.

First, Rokeach pointed out that any concept of “ought” or “should” is absent from his definition. His definition was based on *preferences*.

Second, a value is an enduring *belief*. It is, specifically, a prescriptive or proscriptive belief. A value is also an *enduring* belief. This means that values remain largely stable over time, but they can be changed. They are neither permanent nor fleeting.

Third, a value system exists along a continuum of relative importance. What distinguishes one person’s value system from another is not the presence or absence of a certain value, but the relative importance of each within a common set of values.

Finally, a value is an enduring belief about one of two things: an end-state of existence, or a preferable mode of conduct. A belief about an end-state is what Rokeach calls a “*terminal* value.” A belief about a mode of conduct he calls an “*instrumental* value.”

Terminal values, in Rokeach’s lexicon, can be either personal or social—that is, self-centered or society-centered. Rokeach argued:

It is reasonable to anticipate that persons may vary reliably from one another in the priorities they place on such social and personal values: that their attitudes and behavior will differ from one another depending on whether their personal or their social values have priority: that an increase in one social value will lead to increases in other social values and decreases in personal values: and, conversely, that an increase in a personal value will lead to increases in other personal values and to decreases in social values (Rokeach, 1973, p. 8).

I have dissected Rokeach's definition at length because Hartman's classification of types of value is quite different. Hartman would not agree that "an increase in a personal value will lead to increases in other personal values and to decreases in social values." Hartman's primary categorization distinguishes between personal and social value structures. An increase in one can be achieved independently of the other. However, balanced growth in both is an aim to be sought. In Hartman's categorization, an increase in personal values is likely to result in an increase in social values, as well. In fact, according to Byrum (2007), an increase in personal value capacities is a prerequisite for an increase in social values.

Each theorist's conclusions were determined by the structures they set up through which to define "values."

When categorizing instrumental values, Rokeach stated that these can be either moral or competency-based. Moral instrumental values refer to *social* end-states, and competence-based instrumental values refer to *personal* end-states. Rokeach equated competence-based instrumental values with self-actualization values. He confined the concept of "oughtness" to a narrow spectrum within his definition of values—to moral instrumental values that lead to social end-states.

It can be suggested that 'oughtness' is more an attribute of instrumental than terminal values and more an attribute of instrumental values that concern morality than of those concerning competence (Rokeach, 1973, 9).

Hartman took a very different approach to defining 'value.' His is a concise definition. For Hartman, "good" is defined as "*concept fulfillment*" (Hartman, 1959, 20; 1967, 103-104, 153). This is the axiom of value in Hartman's scheme. In logic and mathematics, an "axiom" is defined as "a proposition that is assumed without proof for the sake of studying the consequences that follow from it."

A thing's value is the same as its goodness. A thing has value, according to Hartman, in the degree to which it fulfills the intension of its concept. "We shall define value in terms of logic... Let us define anything as good (or valuable) if it is *what* or *as* it is supposed to be" (Hartman, 1991, 13). "Oughtness" thus is deeply embedded in Hartman's value theory.

Hartman then described three types of concepts—synthetic, abstract, and singular. In Hartmanian logic, a certain kind of valuation is appropriate to each type of concept. Systemic value and valuation apply to synthetic concepts and to all concepts considered merely as concepts (Dicken and Edwards, 2001, 136); extrinsic value and valuation apply to abstract concepts, and intrinsic value and valuation apply to singular concepts.

For Rokeach, "values" refer to the criteria, or standards by which evaluations are made and not to the objects themselves. In Hartman's framework, value refers *both* to objects and to the criteria by which people evaluate those objects. Any thing, idea, or person can be evaluated in any of three dimensions: systemic, extrinsic, or intrinsic. Anyone can evaluate any given object, idea, or person

according to any of the three dimensions. Value combinations may enrich the properties of valued objects. This is called a *composition*. One example of a composition, to use a word picture often cited among axiologists, is adding chocolate sauce to vanilla ice cream. Doing so produces a new combination with enriched properties. A different value combination, though, can diminish the good-making properties of the valued objects. This is called a *transposition*. For instance, adding sawdust to the top of vanilla ice cream diminishes both of their good-making properties and thus their value. This is a transposition of value.

Hartman's approach to the study of values goes deeper than the above illustrations with ice cream would indicate. For Hartman, ice cream is simply an example abstracted from sensory properties. As a researcher, he was not really interested in enhancing or diminishing the value of ice cream, though as a person he might have had such interests. The real issue for value theory, he maintained, is the structure of the valuational system behind the example. The ice cream is a stand-in for extrinsic objects in general; chocolate sauce and sawdust are stand-ins for extrinsic ways in which extrinsic objects can be compositionally or transpositionally valued.

By contrast, when Rokeach wrote about the relative importance of such concepts as "equality" and "freedom," what he was talking about are *equality* and *freedom*. Rokeach was focusing on those two values themselves, not on any underlying structure that may or may not lie beneath them. Whereas Rokeach was more interested in describing the social consequences of people's values and value systems, Hartman was more interested in the structures that antecede, determine the formation of, and constitute people's values.

6. Norms

Hartman and Rokeach used very different concepts of "*norms*" when establishing the validity of their survey instruments.

To grasp the differences between the value profiles developed by these two thinkers, one must first come to grips with the different ways in which they used the terms "norms" and "normative." Rokeach was a social psychologist; Hartman, a philosopher. I suppose that the way each theorist used "norm" and "normative" was in alignment with his profession, but each used the word to refer to very different ideas. For Rokeach, "norms" refer to a measure of the most frequent occurrence of a phenomenon. They are measures of central tendencies.

Hartman, on the other hand, referred to norms as standards of an axiological ideal. Hartman treated norms as ideal standards, as have most philosophers since Plato. For instance, in mathematics, a "circle" is defined as "a curved line of zero width, with all points equidistant from the center." Pure circles don't exist in the empirical world; they are mental constructs. The defined "circle" becomes, then, a norm against which all actually drawn or extant circles are compared. One has to grasp the synthetic concept of "circle" before one can evaluate something that is said

to be a circle, say, for instance, a hula hoop. When evaluating the roundness of a hula hoop, you are undertaking extrinsic evaluation. This act requires a different norm, one of extrinsic valuation. You judge it by how nearly it approximates the shape of a “true” circle. If you smile while watching your children play with their new hula hoops, you have entered a different world evaluationally. Your evaluation of those “circular” hoops shifts to an intrinsic norm. You enter the normative realm of singular concepts, in this case, a moment of shared joy between you and your children. It’s like the tag line of the MasterCard commercial—*some things are priceless*. Thus, in an act as seemingly simple as evaluating a hula hoop, all three dimensions of valuing may be involved, each in accord with its own axiological norm.

Rokeach used the term “*norms*,” however, to refer to something else altogether. Rokeach defined norms in a way that is commonly used in social psychology, where norms refer to measures of the most frequent occurrences of a phenomenon. Statistically speaking, norms are measures of central tendencies. If the average number of children per married couple in the United States is 2.1, this then is the descriptive or statistical norm against which families can be measured as being larger or smaller. It is not necessarily “ideal.” It is merely common, according to Rokeach, (though at times the common or typical is taken to be the ideal). This difference between philosophers’ and psychologists’ use of “norms” will be very important when comparing the value instruments developed by Rokeach and Hartman.

7. Constructs and Word Choices

Their different definitions of “norms” gave rise to their different methods for choosing the words and phrases to be included in their value surveys.

Here is how Rokeach described the winnowing-down approach that he took to select the eighteen value words that express the terminal and instrumental values used in his survey.

On various grounds—intuitive, theoretical, and empirical—we estimate that the total number of terminal values that a grown person possesses is about a dozen and a half and that the total number of instrumental values is several times this number, perhaps five or six dozen... (Rokeach, 1973, 11)

The 18 terminal values are distilled from a much larger list obtained from various sources: The number of values thus compiled—several hundred—was then reduced on the basis of one or another consideration (29).

After first experimenting with twelve word choices, Rokeach decided that this version, later known as “Form A,” left out too many important values. He

eventually settled upon eighteen word choices after concluding that this number would be “reasonably comprehensive” and yet not too burdensome upon the respondent (29).

Rokeach admitted:

As can be seen, the overall procedure employed in selecting the two lists is admittedly an intuitive one, and there is no reason to think that others working independently would have come up with precisely the same 18 terminal and instrumental values. It would be interesting to see which values others might produce working independently and using the same criteria that have been described here (30).

Whatever words are used, it is clear that if the words are different, excepting synonyms, then a survey based on them would measure something different, too.

For example, in the “Rokeach Value Survey” (RVS) there are no words pertaining to the environment, no words such as “ecology,” “clean air,” “protection of the ozone layer,” or “sustainability.” Presumably, the environment did not loom large in the minds of value theorists at the time when Rokeach did his research. The only phrase approximating this meaning in the RVS is “a world of beauty”.

What if, for instance, one were to replace any of Rokeach’s eighteen terminal values with, say, “a clean environment.” It would then become a different survey. An analysis of the relative ranking of respondents’ preferences between values of “freedom” and a “clean environment” would then leap to the fore as a topic for analysis.

In contrast, substituting one set of words or phrases may not necessarily change one’s results from the “Hartman Value Profile” (HVP). This is because, in the HVP, the words and phrases used are principally important in that they represent an underlying value construct. However, choosing appropriate words or phrases is a matter of serious concern to developers of axiological profiles. The role of word choices in constructing a parallel form of the HVP was explained by Edwards (2008, private correspondence).

In constructing our “Christian Value Profile,” the Meffords and I discovered that although the words have to exemplify the formulas, they are also important in their own right. By that I mean that people are likely to react very differently to different words and phrases that perfectly exemplify the same formula, so in addition to being sure that the forms are correct, profile-makers also have to use judgment about how people are likely to react. This is also one important reason why the Institute has created a new “Hartman Institute Value Profile,” now being validated—we had so many complaints that people react too strongly if not downright irrationally in our own time to things like “Blow up an airliner in flight,” “slavery,” and perhaps other “dated” items—e.g., many do not know what a “heretic” is.

They also COMPLAIN AND PROTEST about having to take “tests” that have such items on them.

In the “Hartman Value Profile,” the selection of eighteen words was not taken, as Kohlberg once said, from a “grab bag of virtues” (Kohlberg, 1970, 61). Rather, each word was selected because it represents one of nine value compositions or one of nine transpositions, as recognized by formal axiology. Each part of Hartman’s profile contains eighteen words or phrases, not as a practical or statistical consideration, but because that is the number that results mathematically from the basis of his theoretical constructs.

Within formal axiology, there are three types of value: the Intrinsic, Extrinsic, and Systemic. These are customarily abbreviated: I, E, and S. These loosely equate to people, things, and ideas. A fundamental precept of formal axiology is that things are more valuable than ideas about things, and people are more valuable than either things or ideas about them (Edwards, 2000, 11). Thus, the symbolic representation of the most basic component of formal axiology is: $I > E > S$. Things get more complicated from here.

Any object of value can be valued or combined positively in a way that enriches goodness. Or, it can be valued or combined negatively in a way that diminishes goodness. Enriching value through positive combinations is called a “composition.” Diminishing value through negative combinations is called a “transposition.” There are eighteen logically possible combinations of the three basic values and valuations, nine compositions and nine transpositions.

Compositions of valuation can be represented by superscripts; transpositions are shown by subscripts. Thus, the eighteen combinations of value and valuation are: $I^I E^I S^I I^S E^S S^S S_S E_S S_E E_E I_S I_E S_I E_I I_I$

These combinations form a hierarchy of value, from highest to lowest, as listed above from left to right.

Hartman summarized the complex mathematical formulae that determine the rank ordering of each element in his survey in his *Manual of Interpretation*.

The symbolization of value combinations follows that of the underlying arithmetical cardinalities... Since each of the three value dimensions S, E, or I, has a numerical value, namely n , $\aleph_0$, and $\aleph_1$, respectively, the value compositions and transpositions have themselves numerical values, and these numerical values can be ordered in a precise sequence (Hartman, 2006, 34).

Hartman’s conviction about the mathematical nature of the hierarchy of values was what gave rise to his value profile. The framing of formal axiology in terms of cardinal number arithmetic is debated and questioned today among axiologists (Dicken and Edwards, 2001; Byrum, 2008).

Such debates notwithstanding, this mathematical structure underpins Hartman's argument set forth in Chapter Ten of his *The Knowledge of Good* in favor of value *science* as opposed to value *philosophy*. He laments that value philosophy caused the "pseudo-scientific confusion of today's social science disciplines" (Hartman, 2002, 310) and the "fictitious scalability" imposed upon phenomena by the researcher (312).

My long-winded explanation of the underlying hierarchy of values is a necessary detour in order for me to be able to explain that and why the words and phrases chosen for the HVP were selected in a very different manner than those chosen by Rokeach for his RVS.

In the HVP, a word or phrase must stand for one of the eighteen value combinations. One set of phrases is used in Part I, called the "World-view," and a different set is used in Part II, called the "Self-view." Both sets follow the same hierarchy described earlier. By ranking the words, the respondent is actually ranking and exhibiting *his or her own value structure*.

For example, in the original HVP, the phrase used to represent E^E is "a good meal." A meal is an extrinsic object. A good meal is a composition; that is, it is better than an ordinary meal (E), and much better than a rotten meal (E_E). In a subsequent experimental version of the HVP, Hartman's phrase for E^E is "a new car." A used car, on the other hand, would represent a diminishment of value of the auto and would be represented as E_E . The next time that your auto dealer warns you that as soon as you drive your new car off the lot, its value depreciates by about \$2,000, you know that your car dealer is speaking as an axiologist.

That *a good meal* and *a new car* are axiologically equivalent is counter-intuitive and takes some getting used to. Because of this equivalency, the phrases *a good meal* and *a new car* can never both be used as choices in the same axiological value survey. An axiological profile cannot be used to determine whether a new car or a good meal is "better" in the mind of any respondent. An axiological profile only determines whether a *new car* or a *good meal* is better than, say, *an assembly line* or *a rubbish heap*.

This leads me to look at the "Rokeach Value Survey" through an axiological lens. Rokeach wrote at length about his findings of the relative ranking of the words *freedom* and *equality* (1973). He found that a person's preference for each is a predictor of that person's views toward racial integration in the United States, at least at the time of his writing. Rokeach drew a lot of meaning out of respondents' rankings of those two words by correlating these choices with other aspects of their preferences and behaviors such as the likelihood of joining the NAACP when solicited (Rokeach, 1973, 123). The connection was empirical or statistical.

An axiological value profile, on the other hand, cannot distinguish between a respondent's relative preference for *freedom* and *equality*. This is because they belong to the same value dimension. Both are systemic concepts, and, without qualifications, neither is a value composition. Rokeach used both of them, I will surmise, as systemic valuations of how a society ought to be organized (S^S). This

places them at the same level in the axiological hierarchy of value, which means that they cannot be compared by means of an axiological profile assessment. Hartman's profile cannot do what Rokeach's did.

Hartman would likely say that Rokeach's inclusion of two concepts belonging to the same value dimension in one survey points to a major shortcoming of the approach taken by Rokeach when attempting to measure and compare values. Hartman wrote:

All kinds of 'mathematical models' are being offered as analyses of valuations—usually based on the analytic concepts of 'choice', 'preferences' and the like, without examination of the value nature of the concepts on which the whole discussion hinges...

Yet, all that the results can possibly show is the percentage of certain answers to certain questions. Whether and how these results are relevant to value or in general to the subject matter under investigation is a matter of the definition of value, or of that subject matter, and such definition is usually avoided (Hartman, 2002, 313-314).

Other social scientists may point to this as a limitation of Hartman's own framework. Hartman was certainly swimming against the tide here. I see merit in both approaches.

Rokeach took great pains to investigate whether assessed values can be used to predict behavior. He explained, "The kinds of behavior we will be especially interested in are those that are exhibited in connection with a wide variety of issues that we all confront in contemporary American society." The research question that Rokeach posed for himself was: "Is it possible to identify the value correlates of a given behavior and the behavioral correlates of a given value?" (Rokeach, 1973, 123).

High among Rokeach's interests in the contemporary American society of his time was the subject of civil rights. He set up a series of experiments to determine whether a person's values correlate with his or her stance on civil rights. The values that most interested Rokeach in this regard were those of freedom and equality.

Rokeach posited that a person who rates equality as more important than freedom would likely be more in favor of civil rights, and that someone who ranked freedom ahead of equality would more likely be opposed to civil rights. He wrote, "On theoretical grounds, equality should be the value that is most implicated in behavior concerning civil rights or discrimination against persons of different ethnic or racial background" (Rokeach, 1973, 123). He conducted several fascinating experiments which, in the main, validated the correlation that he had predicted.

Important to our current conversation is that Rokeach did this by comparing people's preferences towards the relative ranking of two values that, under an

axiological framework, are not comparable. The RVS does something that the HVP cannot do.

I harbor two concerns about Rokeach's approach. First, as quoted above, Rokeach wrote, "On *theoretical* [italics mine] grounds, equality should be the value that is most implicated in behavior concerning civil rights..." It would seem to be more accurate to have written, "On *common sense* grounds..." for, how can there be a theoretical ground for ranking one value over another when all of the values chosen for the survey were selected by an intuitive guess to begin with? My second concern is that Rokeach stated clearly and unequivocally that values are preferences; all *oughtness* is absent from his understanding of terminal values; he claims to give us only statistical correlations. Ultimately, if there is no discussion of whether people ought to support civil rights, of what good is it to know that a higher percentage of people who put equality above freedom are likely to support civil rights than those who put freedom above equality? Would it not be more helpful to have a values tool that offers some guidance as to what ought to be?

8. A Thought Experiment

This being said, let's conduct a thought experiment to determine whether an axiological survey could be constructed to assess axiologically people's rank ordering of the two values of *freedom* and *equality*. To be useful, such an instrument, in Rokeach's view, would have to be related to the context of the societal issues in which Rokeach was interested. In this case, we will stick with the subject of civil rights.

In the case of civil rights, let's suppose that what Rokeach meant by "freedom" was something like: *freedom to do as one pleases*. Let's further suppose that what Rokeach meant by "equality" was: *equality of people under the law*. As re-stated in this way, these two concepts can now be distinguished axiologically because they are now value compositions.

To do as one pleases is an extrinsic act. The freedom to do as one pleases refers to a systemic valuation of that extrinsic act. In the absence of a tertiary qualification, we can suppose that it is a composition, not a transposition. Therefore, freedom to do as one pleases can be written in axiological shorthand as: E^S.

Equality of people under the law is clearly about people. It is about people conceptualized in their uniqueness, and not as part of any class or role. Thus, it refers to people as intrinsic value objects. And equality under the law is a systemic construct regarding people. This combination of value and valuation is once again compositional. Therefore, we can symbolize the equality of people under the law as the systemic valuation of intrinsic objects, written as: I^S.

Both concepts are axiologically "good." But *equality of people under the law* is a higher good than is *freedom to do as one pleases*. Therefore, axiologically we can conclude that it is a higher good for a society to promote equality under the

law than it is to promote freedom to do as one pleases—in those circumstances when those two values may conflict.

Axiology, in this manner, offers a means for inserting a sense of “oughtness” into social science research that otherwise would remain purely descriptive, at least in theory. Of course, one can still argue over the correctness of my axiological classification of the concepts of “freedom” and “equality” as they pertain to civil rights. Furthermore, in different contexts, the two terms might be classified axiologically in different ways. What if, for instance, in a different context freedom were interpreted to mean *freedom from the threat of harm by others*? And, what if equality were interpreted to refer to *equality of opportunity* instead of equality of protection? This may lead to different axiological results, with a different ranking of values. Same root words; different meanings.

Axiology may still result in confusion, debate, and disagreements about the structure of those values under consideration, but at least axiology gives us a framework within which to seek clarity about the meanings of those values. Edwards puts it this way:

We can disagree about whether something is good either because we do not all employ the same standards, or because we are not adequately informed about whether something does or does not have the good-making properties required by its conceptual norm. An objective, scientific approach to questions of good and evil is possible; indeed, it is actual, once axiology has been understood and employed correctly (Edwards, 2000, 247).

The task before us is to understand and employ axiology correctly. One way of doing this is to construct value profiles using axiology as their basis. But there are other ways, too.

9. Is Prediction Alone Scientific?

It would be presumptuous to dismiss Rokeach’s approach as un-scientific solely because it is not axiological, given that Rokeach demonstrated that it is predictive. He demonstrated the predictability of his survey using rigorous statistical methods (Rokeach, 1973). L. Donaldson brings to a head the nature of the difference between Hartman’s and Rokeach’s approach to validity. In his article about the role of organizational economics in management theory, Donaldson refers to the nominalist school of the philosophy of science as being one “which holds that scientific laws are not more than calculating devices, that is, useful fictions (“as if” models).” By nominalist reasoning, “The validity of a model rests not on the accuracy of its assumptions but on the utility of its predictions...” Nominalism is opposed by the realist school of thought, which claims that, in order to be valid, a scientific theory must explicate real causal processes. In Donaldson’s words, “validity is thus verisimilitude” (Donaldson, 1990, 372).

The question before us, then, becomes: which is more important—predictability or verisimilitude? I do not know how Rokeach and Hartman would each answer this question, but I conjecture that Rokeach would favor predictability and Hartman, verisimilitude.

Of course, this may not be an either/or question. What if it can be demonstrated that a theory which explicates real causal processes is also highly predictive? This is the very sort of research that Leon Pomeroy has undertaken in the field of clinical psychology. Pomeroy demonstrated that the I, E, S value dimensions “come together in various combinations and permutations and give rise to the behaviors captured by the scales of psychometrics, including the MMPI and Cattell CAQ” (Pomeroy, 2005, 107).

It remains for researchers to correlate the HVP with other value measurements in the realm of social science to the extent attained by Rokeach, using sample sizes similar to the ones he used. Such a comparison was begun on a smaller scale by Austin and Garwood (1967) using a small sample of community college students (30 male and 35 females) who responded to the HVP, the RVS, the Allport Vernon Lindzey (AVL) survey of values, and the Kohlberg Moral Development (KMD) profile.

J. J. Austin and B. A. Garwood’s findings demonstrate the difficulties to be faced when establishing statistical correlations among instruments that are different in nature and differ in their methods of scoring. Their strongest conclusions about the correlations between the HVP and the RVS were that: (1) the self value dimension of the HVP correlates more strongly with Rokeach’s instrumental values than with terminal values, and (2) that those respondents who scored well on the dimension of self-valuation in the HVP were more likely to rank freedom high in their scale than were those who scored low on the internal self dimension. Equality does not correlate well with the self-valuation dimension. Unfortunately, Austin and Garwood did not explore the possible correlation between the relative rankings of freedom and equality with particular scores of the HVP. So their findings do not shed much light on my current discussion of freedom and equality.

If it can ever be conclusively demonstrated that a social science theory built on real causal processes is more highly predictive than one whose sole claim to validity is its statistical predictability, then this would be in one sense a powerful argument in favor of axiological reasoning. But, to do so would involve relying on the very processes that Hartman strove to de-bunk as part of his attempt to establish the validity of his own approach. It would be like introducing hearsay evidence into a courtroom to object to the other side’s use of hearsay evidence.

10. Other Routes to the Measurement of Values

Instruments such as the HVP and RVS may always be “rubber rulers.” But we need not restrict our search for ways to measure values to the use of surveys or profiles alone. It may be possible to apply formal axiology more precisely to the study of

society in some different manner. For example, axiological classification may be useful as a tool for hermeneutic analysis (Hartman, 1967; Forrest, 2001). And this sort of analysis may offer a richer way to explore the meaning of values and valuation than can be attained by any assessment instrument.

Hartman described how to do just that using secondary, tertiary and even quaternary value combinations within the framework of axiology. He said that this can be done easily. I find it quite difficult and complex. If we do not grasp how to do this, Hartman wrote, perhaps it is “because our value sensitivity is not subtle enough” (Hartman, 1967, 279).

This sort of higher-level analysis of axiological valuation has been somewhat further developed by Frank G. Forrest (2001), who has made presentations at meetings of the Hartman Institute about his experience teaching these precepts at a police academy and in ethics courses at the community college level. If future researchers can develop the hermeneutic method of axiological analysis begun by Hartman and Forrest, it would be beneficial to the advancement of the theory of formal axiology. It would also bring a depth to axiological analysis that it is impractical to attain using a survey tool. The HVP is, in a sense, constrained by its own complexity.

Currently, the HVP looks only as far as secondary value combinations. A survey tool that included tertiary or quaternary combinations would be immensely complex. A quaternary assessment instrument would require, not 18, but 648 value words or phrases that a respondent would have to rank (Hartman, 1969, 279). Given that the current HVP calculus (involving the stack-ranking of 18 terms, twice) already results in 6.4×10^{15} or 6.4 quadrillion possible answers (Hartman, 2006), the number of potential combinations of answers in an instrument with 648 word choices would make interpreting the results an extraordinary feat. Perhaps a hermeneutic approach would permit axiological analysis using tertiary and quaternary value combinations without having to rely upon a stack-ranking of all items every time that an analysis is done.

11. A Further Difficulty in Making Practical Application of the HVP

A significant problem remains for me when trying to make sense of values and valuations through formal axiology. As scientific and quantitative as the structure of values may be, describing specific words or phrases by their axiological structure is devilishly difficult, as my example with freedom and equality illustrates.

Hartman (2002) argues that precision in value measurement can only come from synthetic concepts, not from abstract concepts. He does a credible job of demonstrating why this is so according to the logic of formal axiology, but there remains the task of clarifying and agreeing upon the synthetic construct of any abstract phenomena.

For instance, the more that I study Hartman’s descriptions in the *Manual of Interpretation* (2006) and his other writings, the better I grasp much of the logic

behind his word choices for the HVP. But, even with the answer sheet open in front of me, I still cannot grasp the axiological difference between a *devoted scientist* and a *mathematical genius*. According to Hartman, a mathematical genius is an S^I, whereas a devoted scientist is an I^S. To me, both phrases seem to pertain to people as seen in certain roles, with certain characteristics. Why are they not both E^S, I wonder? Either I am quite dull-minded, or else the application of the logic that Hartman valued so highly to everyday words and phrases is not as easy and clear-cut as he supposed.

12. Conclusion

Social science research can, perhaps, some day be done better than it is carried out today. In developing formal axiology, Hartman pointed us towards an improved method for discussing and understanding values, but much work remains to be done before we can use it well. Hartman has, perhaps, built a bridge to the future of value studies, but it remains a fragile one, and it has not yet been often traveled. It is more of a tight rope walk than a Golden Gate.

I am intrigued by Hartman's argument in Chapter Ten of *The Knowledge of Good* (2002), even though I continue to struggle to grasp its full meaning and consequence. The more I pursue my studies of axiology, the more radical and revolutionary I recognize Hartman to be. He would, in effect, challenge the merits of the preponderance of empirical social science research as practiced and taught in academia today. In this regard, surprisingly enough, critical social theorists and feminist theorists may find common ground with Hartman (Bentz and Shapiro, 1998; Sprague, 2005). At the time Hartman lived and wrote, positivism held sway over the methodologies of social science. It is no wonder, then, that approaches such as Rokeach's rose to prominence. In the years since, this has changed. The social sciences have opened themselves to other ways of validating truth claims. Ironically, it may be that the "science" advocated by Hartman will find a friendlier audience among post-positivists than it did among the empirical researchers of his own time.

Works Cited

- Austin, J. J. and Garwood, B. A. (1977). "The Relationship of the Hartman Value Profile (HVP), Rokeach Value Survey (RVS), Allport-Vernon-Lindzey Study of Values (AVL) and Kohlberg's Theory of Moral Development (KMD)." Transcript of presentation given to the National Association of School Psychologists Convention, March 1977, Cincinnati, OH.
- Bentz, V. M. and Shapiro, J. J. (1998). *Mindful Inquiry in Social Research*. Thousand Oaks, CA: Sage.
- Byrum, C. Stephen (2007). "The Value Structure of Work." Conference paper, R. S. Hartman Institute Annual Conference held October, 2007.

- _____ (2008). "A Bushel and a Peck: Robert S. Hartman's Axiology and Transfinite Mathematics," *Journal of Formal Axiology and Practice*, 1, 3-19.
- Dicken, Thomas M. and Edwards, Rem B. (2001). *Dialogues on Values and Centers of Value: Old Friends; New Thoughts*. Amsterdam - New York: Rodopi.
- Donaldson, L. (1990). "The Ethereal Hand: Organizational Economics and Management Theory," *The Academy of Management Review*. 15:3, 369-381.
- Edwards, Rem B. (2000). *Religious Values and Valuation*. Chattanooga, TN: Paidia.
- _____ (2008). Private correspondence.
- Edwards, Rem B., Mefford, David., and Mefford, Vera (2005). *Developing Your Spiritual Potentials: The Christian and Religious Value Profiles*. Xlibris.
- Forrest, Frank G. (2001). *Ethical Decision Making for the 21st Century*. Daytona Beach, FL: Speedway Press.
- Grimm, P. (2005). *Questions of Value, Part 1 of 2* (audio book). Chantilly, VA: Teaching Company.
- Hartman, Robert S. (1959, 1970). "The Science of Value." In Maslow, Abraham, ed., *New Knowledge in Human Values*. Chicago: Harper and Row.
- _____ (1967). *The Structure of Value*. Carbondale, IL: Southern Illinois University Press.
- _____ (1991). "The Nature of Valuation." In Edwards, Rem B. and Davis, John W., eds. *Forms of Value and Valuation: Theory and Applications*. Lanham, MD: University Press of America.
- _____ (1994). *Freedom to Live: The Robert Hartman Story*. Ellis, Arthur R, ed. Amsterdam - Atlanta: Rodopi.
- _____ (2002). *The Knowledge of Good: Critique of Axiological Reason*. Ellis, Arthur R. and Edwards, Rem B., eds. Amsterdam - New York: Rodopi.
- _____ (2006). *The Hartman Value Profile (HVP) Manual of Interpretation. 2nd Edition*. Knoxville, TN: Robert S. Hartman Institute.
- Kohlberg, Lawrence (1970). "Education for Justice. A Modern Statement of the Platonic View." InSizer, N. F. and Sizer, T. R., eds. *Five Lectures on Moral Education*. Cambridge: Harvard University Press.
- Pomeroy, Leon (2005). *The New Science of Axiological Psychology*. Amsterdam - New York: Rodopi.
- Rokeach, Milton (1960). *The Open and Closed Mind: Investigation into the Nature of Belief Systems and Personality Systems*. New York: Basic Books.
- _____ (1972). *Beliefs, Attitudes, and Values*. San Francisco: Jossey-Bass.
- _____ (1973). *The Nature of Human Values*. New York: Free Press.
- _____ (1979). *Understanding Human Values: Individual and Societal*. New York: Macmillan.
- Sprague, J. (2005). *Feminist Methodologies for Critical Researchers: Bridging Differences*. New York: AltaMira Press.