The Anatomy of a Worldview: The Eternal Self-Identity

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Abstract

Worldview" is a popular term used in a variety of contexts. Unfortunately, its usage is frequently vague and often more descriptive than definitive. A specific definition is possible, however, by condensing the concept to the range of replies to the question, "How do I understand myself relative to ultimate truth?" This paper will explain that: (a) the emergence of a worldview is a natural and necessary by-product of the expansive nature of human thought, (b) it is the reference tool used to emulate objectivity in determining ultimate truth, and (c) this paradigm ultimately defines one's self-identity. In short, a person cannot think and mature without necessarily constructing a worldview—an eternal self-identity.

Introduction

Reviewing the vast abundance of literature available today regarding the subject of the human worldview, one thing appears to be glaringly absent: an examination and understanding of its fundamental nature. Many define what it does, how it works, and how it affects people and mankind in general. However, the fact that few if any seem to have taken time to examine its essence and nature results in the presentation of general truisms based on intuition without an explanation for their basis, ad hoc definitions created to suit the author's purposes, or, worse, philosophical mistakes caused by failure to understand its real nature. Consequently, a serious consideration of the worldview's nature and origin is long overdue.

Webster's New World Collegiate Dictionary defines "worldview," *calque* from German, as "a comprehensive, especially personal, philosophy or conception of the world and of human life" (Neufeldt, 1988, p.1540). Geisler (2002, p. 785) expands,

> A *worldview* is how one views or interprets reality. The German word is *Weltanschauung*, meaning a "world and life view," or "a paradigm." It is the framework through which or by which one makes sense of the data of life.

Or, consider the view of Christian apologist and founder of Summit Ministries, David Noebel:

> Every individual bases his thoughts, decisions, and actions on a worldview. A person may not be able to identify his worldview, and it may lack consistency, but his most basic assumptions about the origin of life, purpose, and the future guarantee adherence to some system of thought (Noebel, 1997, p. 1).

Speaking from a very different perspective, cultural anthropologist Gary Palmer says:

> As I use the term [worldview], it refers to the fundamental cognitive orientation of a society … subgroup or … individual [encompassing] fundamental existential and normative postulates or themes, values [often conflicting], emotions and ethics; it includes conventional cognitive

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> models of persons, spirits, and things in the world…. It includes as well metaphorical … structuring of thought (Palmer, 1996, pp. 113, 114).

Late anthropologist Clifford Geertz offered a much simpler definition:

> Their picture of the way things, in sheer actuality are, their concept of nature, of self, of society … their most comprehensive ideas of order. (quoted by Palmer, 1996, p. 114)

Alternatively, Palmer also quotes anthropologist Robin Ridington's claim that

> worldview cannot be understood without language. It is fundamentally produced by linguistically mediated human thought. (Palmer, 1996, p. 113)

Definitions of "worldview" vary, but even given the above spectrum of perspectives, they appear as variations on a theme. This paper will show all these definitions to be correct, although incomplete. If all are essentially correct, however, what is the unifying principle? One clue is that each simply presumes the worldview's existence, but none explain its origin. To find the point of convergence, then, several questions must be considered: What causes a worldview to exist in the first place? Why must "every individual" have a worldview? Is there a reason one could not function effectively without one?

A logical place to start to understand the origin of a worldview, then, is to ask how a person generally acquires and processes information in an effort to trace what actually causes the worldview to come into existence and to be utilized. To do this, a series of ten premises are presented and discussed (Figure 1).

I	Sense experience, relative to the perceiver, forms the basis for all understanding.
II	Raw sense information must usually be interpreted, which is the function of thinking.
III	A second information category - virtual data - is used in the same way as sense data.
IV	The function and purpose of thought is to interpret sensory and virtual data via rationalization processes (or algorithms).
V	Primary sense information is not subjective, but observer bias influences both observation and interpretation of data.
VI	The operation of thinking algorithms described in Premise IV is not the same as instinct.
VII	Thought requires a logical "error-checking" function that also validates meaning. It attempts to answer the question: "What is true?"
VIII	This function also provokes a parallel validation question: "How can I know what I believe to be true actually is?"
IX	Belief that something is true also defines what is true about self. Consequently, the search for certainty leads to the question: "How do I understand myself relative to ultimate truth?" Cumulative answers here provide a matrix that defines a worldview, which defines self-image *and* perception of truth.
X	Since humans are finite, a worldview is, at best, a self-limiting reflection of truth.

Figure 1. Ten premises underlying a worldview.

Premise

Premise I: Sensory data is the primary information category and is fundamental to human intellectual development. All higher constructs are based on sense. Consequentially, when an individual's knowledge base is traced back to its origin, *everything a person understands* in a larger sense—beginning from basic sensory information and extending to one's most sophisticated understandings—*is understood relative to himself*.

Acquired languages (conventional written, conventional spoken, visual symbolic, touch symbolic, and including basic relational observations) are sensory-dependent information structures and cannot develop if the associated sensory mechanism is incapacitated. Helen Keller serves as a classic example of the compulsive nature of sense-to-language development, which in turn is prerequisite to the human intellectual development. Since she was blind and deaf, her teacher had to help her connect the signs for "water" in her hand, using the faculty of touch, before Helen's intellectual world opened up.

"Languages" as used here includes normal communication languages, specialized (technical) working languages, formal and informal sign languages,

and observed physical relationships or principles requiring observation to be understood, as well as any other language (e.g., body language) enabling an individual to communicate, create, and function within his or her community of individuals.

Sensory information is the lowest intellectual layer and the portal to language and reason. If, for whatever reason, it does not develop, no other layers of cognitive intelligence can or will develop. An individual cannot imagine a sound never heard or a color never seen or understand that water does not run uphill unless it has been observed. Extended or permanent depravation of the sensory layer is demonstrably destructive to human development (Sonksen and Dale, 2002; Thielke and Shriberg, 1990) and mental well-being (Grassian, 2006).

People learn by way of analogy-to-self, so the sense layer is foundational. For example, children around the world count in base ten simply because most every child has ten fingers! Information that cannot be directly or indirectly related to one of the five senses (i.e., sight, sound, taste, touch, or smell) becomes indiscernible from bald fiction and thus difficult to argue with the certainty that one can know it to be true. Stated differently, sensory data is a necessary but insufficient condition for learning and development of intelligence.

While Premises III and IV will discuss analogy's role in understanding, Behe (2006) presents a classic example of how analogy to sense facilitates human scientific understanding. Chapter 1 of his book, *Darwin's Black Box*, features a section titled "A Very Brief History of Biology," wherein Behe chronicles the history of biological studies or, more precisely, its technological tools of observation. Until technology could assist in visualizing its details, there was simply no way to deduce biology's true nature because life was (and still is) far more complex than could be imagined. Indeed, Darwin's misconception regarding the mutability of the cell is still at the crux of the intelligent design/mechanistic evolution debate today. Scientific methodology requires observation, which simply demands either direct or indirect use of the senses.

Adler refers to sensory data as "sensible objects of perception," as opposed to "intelligible objects of perception" (Adler, 1985, p. 65), and also recognizes sense is always prior.

> The extremism just noted is avoided by acknowledging first, that the intellect depends for all its primary apprehensions upon sense-experience; and second, that, while some objects of thought are purely intelligible, our sense-experience provides us with the objects that, with rare exceptions, are never sensible. (Adler, 1985, p. 35)

This is because "intelligible objects" draw on analogy to sense-experience objects for their very existence using "abstraction," according to Locke (Adler, 1985).

Premise I may first appear to be a materialistic argument, denying the supernatural. In reality it only says communication is built on language, which presumes normal formative sense experiences. Even a brief review of prophetic biblical language demonstrates that communication always borrows on analogy to sense. For example, anthropomorphic statements describe God as having arms and hands (Isa. 62:8; John 12:38), eyes and ears (Deut. 11:12; Ps. 34:15), and even wings (Matt. 23:37). The Trinity is described as a Father-Son relationship (John 17:1), and the most ethereal of prophecies borrow heavily on human experience for verbiage (Ezek. 1:4–28; Rev. 12:13–17; etc.). Lacking prior sense experience, these analogies are meaningless. Likewise, every apologetic argument is also owing to language as a basis. Indeed, our very ability to perceive or conceive of God is predicated on correlation to normal life experiences! Even divine revelation presumes sense experience. Geisler explains:

> The question is: How can finite human concepts convey an Infinite God? Aquinas's answer is that they must do so analogically. God is neither identical to nor totally different from our expressions about him. Rather, He is similar to them. (Geisler, 2002, p. 18)

In summary, sense experiences provide the particles from which language is formed, and language provides the matter out of which intellectual thoughts are constructed. Lacking initial sense experience, none of this intellectual hierarchy will materialize. If a language does form, some alternative sense proxy was found. Thus, every opinion or understanding is ultimately traceable to individual, not communal perception—at least not in any primary sense. Note that while the preceding might hint at solipsism, Premise V will show otherwise.

Premise

Premise II: Raw sense information is rarely directly meaningful and must nearly always be interpreted to some degree, which is the function of thinking.

Neurological sensations alone are rarely useful (except as a true instinctive response), and even basic interpreted information does not convey context. By way of illustration, perceiving red requires basic optic functionality and the brain's receiving/processing capacity; no rationalization or "thinking" is required. And, since most human optic systems function similarly (unless the individual is color blind), most individuals report similar experiences. Cognition requires an acquired language to interpret the color as "red," or "rojo" (Spanish), or "красный" (Russian). However, just because a red light is shining and an individual knows the color's name does not mean the observer understands to stop his vehicle. This requires second and third order interpretations of the

data—knowing how to control the vehicle, knowing traffic laws, etc.

Note that objectivity is pursued at higher cognitive levels discussed in Premises VII, VIII, and IX.

Premise

Premise III: A second information category exists, referred to here as *virtual data*. These are second, third, and higher order inferences or constructs drawn from first-order sense data, which then become accepted with equal validity to sense data, and used in processing toward even larger general truths. This information layer is dependent on functioning language, as described in Premises I and II, and on the competency of functioning intelligence, described in Premise IV.

Consider this illustrative example. Comparing the existence of energy (sensory observation datum 1) against the second law of thermodynamics (virtual datum 2, drawn from processing datum 1's behavior), one might conclude that something outside the observable universe must have provided its energy (virtual datum 3). Then, evaluating the order found in life (sensory datum 4), one might conclude this source of energy must also be intelligent (virtual datum 5). Based on admitting God as a logical probability (meaning applied through rationalization of virtual data 3 and 5), one might surmise a logical obligation to his Creator (virtual datum 6). Consequently, once one concludes such an a priori obligation, other perceptions and subsequent actions would be influenced.

The previous example illustrates a logical progression based in hard data but consisting of projections where certain inferences become accepted as data using third-, fourth-, and fifth-order conclusions. The point here is not the likelihood that one might accept these particular conclusions, but simply to present a working example of "virtual data." Adler (1985, p. 65) refers to "virtual data" as "intelligible objects of conceptual thought." Two important concepts here are (a) that virtual data are built based on existing/functional vocabulary using processes such as analogy (or "linguistically mediated thought" per Ridington above), and (b) that vocabularies cannot form absent initial sense experiences.

Epistemologically speaking, human understanding develops by either direct or indirect analogy to self. According to Locke,

> We have no knowledge farther than we can have perception of … agreement or disagreement [between our ideas] 1. Either by intuition, or the immediate comparing any two ideas; or, 2. By reason, examining the agreement or disagreement of two ideas, by the intervention of some others; or, 3. By sensation, perceiving the existence of particular things. (Locke, 1690, book 4, ch. 3, par. 2)

Locke's 1 and 2 represent virtual data; 3 is sensory. Research into "object permanence" suggests the human ability to create virtual data starts as young as just a few months (Baillargeon and DeVos, 1991). Object permanence is the idea that objects continue to exist, even when hidden from view. Infants as young as 3.5 months seem to understand when "impossible" scenarios appear to violate basic laws of physics.

The main point is that an individual's entire intellectual construct is fundamentally subjective, acquired by sensory and processing events unique to each individual. This is true at basic levels of verbal communication right through to high-level concepts such as understanding DNA and advanced physics. *Fundamentally, everything a person truly understands, by definition, must be a function of his perception or he did not understand*! High-level concepts "everyone agrees on" are accepted as such because enough commonly experienced sensory and well-reasoned virtual data exist to justify them as "facts" within human experience (of course, occasionally "facts" are adjusted to align with reality).

Premise

Premise IV: The function and purpose of thinking is to interpret both sensory and virtual data using rationalization processes, which are made in the context of one's existing knowledge base.

Thinking is the process of ordering data to understand context, utilizing rationalization processes or "intelligence algorithms." Processes used to determine larger general truths include analogy (ratio, interpolation, extrapolation), common sense (scenario validation, compare, and contrast), and imagination (creativity).

Our capacity for language (data acquisition) and advanced rational thought (data processing) represent perhaps the two most identifiable distinctives characterizing humanity. Meaning is simply value assignments projected by these processes (effectively the creation of another virtual datum point).

One research field that suggests thinking reflects algorithmic operations on data is artificial intelligence (AI). AI attempts to model human thinking to provide creative solutions in signal, image, and speech processing, automated reasoning, computational theories of learning, heuristic search, knowledge representation, natural language understanding, qualitative physics, robotics, and more, by using software and hardware architectures customized for AI applications.

Definitions of AI generally involve comparison to human thinking. However, exact definitions vary precisely because of the difficulty in understanding and defining how humans think. Philosophically, AI can be generally divided into two broad categories.

> The assertion that machines could act *as if* they were intelligent is called the **weak AI** hypothesis, and

> the assertion that machines that do so are *actually* thinking (not just *simulating* thinking) is called the **strong AI** hypothesis. (Russell and Norvig, 2009, p. 1020)

Little controversy surrounds "weak AI," but philosophical challenges like Searle's (Searle, 1999) "Chinese Room Argument" question whether "strong AI" is achievable. Cole (*2009*) provides a good philosophical review of strong AI. The philosophical implications of strong AI inescapably highlights the appearance of design in human cognition, as seen in Cole's closing comments.

> This creates a biological problem…. While we may presuppose that others have minds, evolution makes no such presuppositions. The selection forces that drive biological evolution select on the basis of behavior. Evolution can select for the ability to use information about the environment creatively and intelligently, as long as this is manifest in the behavior of the organism. If there is no overt difference in behavior in any set of circumstances between a system that understands and one that does not, evolution cannot select for genuine understanding. And so it seems that on Searle's account, minds that genuinely understand meaning have no advantage over less mysterious creatures that merely process information, using purely computational processes that we know exist on independent grounds. Thus a position that implies that simulations of understanding can be just as biologically well-adapted as the real thing, leaves us with a puzzle about how and why systems with "genuine" understanding could evolve. Original intentionality and genuine understanding become epiphenomenal. (Cole, 2009)

Endless debate is sure to surround AI's theoretical and practical limitations to modeling human thinking. However, the point here is that many recognize the analogy between advanced computer processing and human processing.

More realistically, whether human thinking represents algorithms performed on data can be tested by considering human cognitive difficulties. For example, neuropsychological exploration of autistic spectrum disorders (e.g., Asperger's) drives research into "executive functioning" or "cognitive control," which identifies the nature of these "intelligence algorithms," attempting to understand what constitutes cognitive dysfunction. As a case in point, for an autistic savant who can memorize an entire phone book, the problem is not his ability to acquire data. In that regard the individual is highly functional. His problem is the ability to manipulate acquired information in order to create meaningful virtual data and come to useful conclusions.

American educational psychologist John B. Carroll (1916–2003) authored a three-stratum theory of classification of cognitive abilities. In his seminal work, *Human Cognitive Abilities: A Survey of Factor Analytic Studies*, Carroll explains,

> In general, a *process* refers to any action or series of actions by means of which something is operated on to produce some result. A *cognitive process* is therefore one in which mental contents are operated on to produce some response. These mental contents may be representations or encodings either of external stimuli or of images, knowledges, rules, and similar materials from short-term or long-term memory. (Carroll, 1993, p. 10)

Moreover, he continues:

> Sternberg … proposes … that such tasks … can be analyzed into the following components:
>
> Encoding: The process of translating each stimulus into an internal representation upon which further mental operations can be performed.
>
> Inference: The process of discovering a rule, X, that relates the A term of the analogy to the B term, and storing the rule in working memory.
>
> Mapping: The process of discovering a higher-order rule, Y, that relates the A term to the C term, and storing the result in working memory.
>
> Application: The process of generating a rule, Z, that forms an image of the correct answer and tests it against the D term of the analogy.
>
> Justification: The (occasionally necessary) process of deciding whether the D term of the analogy is sufficiently close to the image formed by the application process to be regarded as correct.
>
> Preparation-response: The (control) process of preparing to solve the analogy, monitoring the solution process, and translating the solution into a response. (Carroll, 1993, pp. 10–11)

In reality, reducing cognition to simply "data" or "intelligence algorithms" is overly simplistic. From an imbedded-systems programming viewpoint, better models would surely require low-level adaptive drivers and layered programming techniques, etc. (Stevens, 2009). However, this discussion was intended to highlight the purpose of thinking and the method used to achieve that purpose. The purpose of thinking is to draw logical conclusions from given data, and methodologically it uses processing techniques or "algorithms" demonstrated by these examples.

Premise

Premise V: Primary sensory information is not subjective in itself and is based in reality, but observer predispositions will necessarily influence both the observation and the interpretation of the data.

Note that this statement does not infer solipsism. *Solipsism* is "the assertion that everything of which I am aware is a figment of my own mind" (Adler, 1985, p. 24). Rather, Premise V only states "everything of which I am aware

is a product of my own observation," or more simply, "I am only aware of that of which I am aware" and by extension "I am not aware of aspects of reality I have not directly or indirectly observed." Whereas solipsism attempts to redefine truth, Premise V makes no statement whatsoever about truth. However, it does speak to observational limitations. This paper, in fact, is about how we mentally model reality, which presumes there is an objective reality to model. The correspondence theory of truth, enjoying a rich history of adherents from Aristotle, Plato, and Aquinas through to modern-day apologists such as Geisler and Sproul, essentially states "truth is that which corresponds to reality."

While sensory data are fundamentally single-point observations on reality and theoretically should be "objective," studies abound demonstrating that human interpretations can be directly and indirectly influenced. Nowhere is this more critical on a daily basis than in eyewitness courtroom testimony. As of December 2010, The Innocence Project's website (www.innocenceproject.org) reported:

> Eyewitness misidentification is the single greatest cause of wrongful convictions nationwide, playing a role in more than 75% of convictions overturned through DNA testing.... Research shows that the human mind is not like a tape recorder; we neither record events exactly as we see them, nor recall them like a tape that has been rewound. Instead, witness memory is like any other evidence at a crime scene; it must be preserved carefully and retrieved methodically, or it can be contaminated.

Likewise, in its "Statement of Best Practices for Promoting the Accuracy of Eyewitness Identification Procedures," the American Bar Association, Criminal Justice Section (2004) records that factors affecting eyewitness accuracy are typically grouped into five categories: (1) the witness's characteristics, (2) the perpetrator's characteristics, (3) the nature of the event (the crime) itself, (4) post-event experiences, and (5) witnessing or testifying factors. Predispositions and subjectivity in both short-term and long-term observation, recollection, and other factors can lead a fully well-intentioned witness to swear under oath and with full conviction to a false statement.

Regarding solipsism, the validity or failure of a witness's observations clearly does not redefine reality. As any wrongly convicted individual can easily testify, conviction of the wrong individual does not facilitate justice but creates yet another injustice. Contrary to solipsism, what one believes to be true does not define truth and may have nothing to do with it.

Premise

Premise VI: The operation of thinking algorithms described in Premise IV is differentiated from the operation of instinct. Instinctive knowledge fundamentally does not require cognitive process; it is "hard-wired," predetermined responses to specific stimuli, although secondary observations can be made about instinctive behavior.

Instinct is categorically different from thinking, as demonstrated by examples such as an infant's nursing reflex, annual global flight patterns of butterflies and birds, or bee communication "language." And, while humans do posses instincts, they tend to be more abstract than in "lower" animals and thus less obvious. The human propensity toward acquiring and teaching language is instinctive, but the language itself is not. Furthermore, algorithmic processes discussed in Premise IV are instinctive, but their development is limited or, more accurately, facilitated by an individual's success in acquiring functional languages that enable him to exploit those processes.

Premise

Premise VII: The thinking process requires inclusion of a logical "error-checking" function for error correction and validation of meaning. This premise primarily involves first-order fact checking for key data and/or validation of key decision principles, generally asking, "What is true?"

Good thinking requires revaluating judgments. Carroll's quote in Premise IV describes this in the cognitive processes of *application*, *justification*, and *preparation-response*. Adler describes this error-checking process as it functions in perception.

> What is true of one type of cognitive idea, our perceptions, is true of all other types of cognitive ideas—all of them the means, not the objects, of apprehension; *that by which*, not *that which*, we apprehend.
>
> We remember some past event or happening. But we know … our memory can play tricks on us. We may, therefore, be cautious enough to ask whether what we remember really happened in the past as we are remembering it. There are various ways of finding this out … and so we make the judgment that the event that is the object of our memory did really occur in the past as we remembered it.
>
> It is necessary to note here that there are two separate acts of the mind. The first is an act of simple apprehension—the act whereby we remember a past event. The second is a more complex act of judgment, usually the result of reasoning or of weighing the relevant evidence. The judgment may be either affirmative or negative.
>
> For every object of thought that we apprehend by means of our concepts or conceptions, we face the question that calls for a judgment about its existence in reality. (Adler, 1985, pp. 16–18)

Understanding involves two aspects: first, simply apprehending a thing or

concept (acquisition of data and virtual data) and, second, validating the meaning or relevance of that thing or concept. In the global scheme of things, a worldview is the ultimate outgrowth of this second process.

Premise

Premise VIII: As a person attempts to validate his information and judgments, Premise VII's "error-checking" function drives introspective review, raising a parallel truth question: "How can I be certain what I believe to be true is *actually* true?" The attempt here is to validate whether his *judgment criteria* are flawed or real. This parallel validation process is inherently subjective, but it pursues the goal of objectivity and correct perception of reality.

A person cannot achieve understanding based on information he does not have. To the contrary, judgments are made in the context of existing knowledge. Moreover, perception presumes a perceiver, which demands awareness of "self" and personal limitations. Philosopher James Fredrick Ferrier coined the term "epistemology" and wrote,

> The main result of the epistemology is this: In answer to the question, *What is knowledge or Knowing*? it replies that all Knowing is the apprehension of oneself along with all that one apprehends. This cognisance of self in addition to whatever things, or thoughts, we may be cognisant of—this, and this alone, is knowledge … further, in answer to the question, *What is absolutely unknown and unknowable*? it replies that everything without a "me" known along with it, and that every "me" without a thing or thought known along with it, is absolutely unknown and unknowable. (Ferrier, 1854, pp. 391–392)

Given Adler's (1985) point regarding the need to validate a memory or understanding, when a person says he or she understands something, on what basis can the individual know it to be true and to what level of certainty? Achieving objectivity requires one to first clearly define his foundations of understanding. This, of course, must include clear self-awareness regarding personal perceptual limits. In order to assign valid meaning, Premise VII's "error checking" involves validating first-order understandings and interpretations. But this forces a parallel process where the thinker considers whether his judgment criteria are valid. This secondary process involves considering how one's presumptions, bias, or other limitations may have influenced observations, as well as the possible construction of additional virtual data, if necessary, in order to yield a conclusive valuation.

Thus, determining truth as it corresponds to reality requires objectivity, which demands "calibration" of reference data (error correction), as well as determination regarding the possible need for additional information. Again, this is done using the data and virtual data at hand. This seems circular, but a starting point is needed before anything can be falsified. Generally speaking, since increased data corresponds with better perception, leading to more competent decisions, a good thinker will always try to understand context by learning more than the minimum necessary. This introspective error-correction process attempts to validate understanding against reality and the "resolution" of his mental construct depends on his data's density. Consequently, this intrinsic need to evaluate and interpret data before it can be used triggers an expansionary search for knowledge, hoping to clarify context.

This does not mean that more educated individuals are automatically better at determining truth. While true in a limited sense—for example an obstetrician usually knows more than a midwife in regard to delivery and healing—keep in mind there are two components to thinking: the data being processed and the algorithms performing the processing. One may possess extensive information, while another may be particularly adept at thinking. Both aspects are important, and extraneous information sometimes may only cloud a decision.

On larger life issues, most virtual data are not scientifically verifiable anyway. For example, events outside immediate human experience such as the origin of the cosmos are not open to scientific validation, yet they are relevant to many moral dilemmas. Thus, it is entirely reasonable that a blue-collar worker possessing excellent common sense but minimal education may understand ethics better than a highly educated academic or scientist holding an unethical worldview (e.g., Nazism). The difficulty of an overconfident "intellectual" (of whatever stripe) is that he or she may not objectively recognize actual limitations and, in zeal for understanding, fail to differentiate between objective truth and personal philosophy. Unfortunately, while this qualification had to be interjected to guard against projection to the illogical conclusion that greater education automatically equals greater wisdom, given our stated goals, further discussion will have to be relegated to a later paper.

Premise

Premise IX: Something a person believes to be certain truth must apply to the person himself, or it is not universally true (i.e., certain truth). Thus, the "error-checking" process described in Premise VII and expanded in Premise VIII inevitably becomes a mirror asking, "What is the relationship between myself and reality?" Expanded to its most comprehensive expression, this question becomes, "How do I understand myself relative to ultimate truth?" The summation of answers to this question provides the reference criteria defining one's worldview. Con-

sequently, the worldview paradigm provides a matrix of answers used as a tool to emulate true or absolute objectivity and defines what an individual holds to be most true, ultimately about him or herself.

The error-correction process, then, attempts to generate an expansion of knowledge sufficient to encompass all aspects of the subject at hand. This normal validation process is the same at all scales, whether small, immediate problems or large, complex, and perplexing dilemmas. As this process continues to expand, it drives the individual to attempt to integrate all of perceived reality in order to identify errors and observational distortions. The first-order validation process described in Premise VII generates an expansive quest asking generally, "What is true about all of reality?" However, this parallel process forces a philosophically prior question: "How do I understand myself relative to ultimate truth?" which, in fact, defines a person's worldview! This seeks to both create and validate an *observation platform* from which one can make solid truth judgments. After all, no one wants to be deceived by bad assumptions or unrecognized observational limitations. So, objectivity demands a clear sense of self-awareness. This question of self-awareness is philosophically prior because failing to understand how to square an observation with reality may easily skew correct perception of it. Stated otherwise, if one cannot say what is true with certainty about his ability to observe, what can he say with certainty about any observation made? So, confirming the validity of one's *observational perspective* is prior to validating judgments about reality.

Thus, since all understanding starts from self (Premise I) and expands to the world around, in practice the worldview paradigm first defines self-identity and then describes truth about the world around, which is why naming (identity establishment) is so important to human development. Moreover, because individuals act as their own moral agent, having an *accurate* worldview is crucial to valid judgments. Even the choice to defer to another authority becomes a functional judgment. So, from the worldview paradigm (defining truth about the world and, by mirror effect, self) flows judgments, decisions, and actions. Adam's fall exemplifies how actions follow actual belief regarding reality; one can attempt to predict reality, but possibly be quite wrong if a faulty paradigm is adopted. Thus, Christianity integrally requires faith in the salvation process. Based on the sacrifice of Christ, we each have the opportunity to effectively reverse Adam's disbelief by embracing the key truth identities defining the faith (a worldview, in fact). Careful examination, however, reveals the fact that all worldviews—theistic, pantheistic, or atheistic—at their most basic levels are arrived at by faith, regardless of view.

These processes as a whole provide the mechanism used to determine truth from falsehood. If truth is unclear, valid judgments and appropriate responses are impossible, whether they involve a single judgment or the integration of a worldview paradigm. A worldview, then, is a matrix of truths solved iteratively, similar to a matrix equation or mathematical curve fitting, with a hierarchy of certainties yielding "calibration coefficients" defining when truth is supposedly clear, similar to how the Hubble telescope's optical calibration coefficients define accurate aspect ratio and focus. As it is adopted and updated, a worldview serves as one's cipher code to truth. Just as a surveyor validates alignment of his transit and if his data appears suspect naturally rechecks his transit and measurements, one defines and validates one's observational framework (i.e., worldview) in order to correlate truth with reality. Using data and virtual data as the physical material, man uses these thinking algorithms to weave a matrix of truths from which to make solid truth judgments, much as spiders start with open air and attempt to weave their web into a work platform. Some of those platforms are well thought out with mathematical precision, and others apparently are haphazard and perilously thrown together, but they are always crafted by the purposes the individual is attempting to achieve. This inherently individual and subjective process is the tool used to emulate functional objectivity, which is why the worldview question must be stated in the first person. Culturally, worldviews often are shared by countries, religious orders, etc., but that happens to the degree that an individual adopts the society's worldview paradigm for himself. Thus, regardless of the amount of "group think" and social pressure involved, worldviews are ultimately individually held and maintained.

A worldview, then, exists as a natural result of the expansive nature of thinking and serves to interpret information and correct for observational distortions and/or limitations, providing the reference tool for emulating objectivity in determining truth. Just as computer programs sometimes create working files for reference, the simple act of thinking eventually will generate a worldview and, once created, frequently be referred to and periodically updated. In summary, while the answers assigned may be convoluted and complex, the worldview construct itself is really a straightforward device, perhaps best expressed as answers given to the question, "How do I understand myself relative to ultimate truth?"

As a closing comment, some might reasonably ask if this question could be worded differently or better. For example, since truth is at issue, one might phrase it: "What is true?" However, this fails to clearly recognize the implied personal perspective. A rephrase might ask, "What am *I* sure is true?" But this fails to emphasize that this search for "truth" hopes to correlate truth with reality and also that self-identity is being framed as well. So, I need to recognize that

other phrasing might be possible, but the debate would likely be endless, as each author emphasizes some aspect of the concept he wishes to promote. The guiding principles, however, are that any wording must consider the causal mechanisms described here. If not, the discussion loses sight of the worldview's true nature and authors may make inadvertent philosophical mistakes, incorporating their views into a definition and/or indulging in unfounded general proclamations. Phrasing goals I used intended to convey that (a) truth is a pursuit common to all but individually understood, (b) a worldview paradigm is aggregated across all time because it seeks to identify universal truth, and (c) ultimately it defines the individual's understanding of himself.

Premise

Premise X: Since a worldview is, at best, a reflection of actual truth, the sobering, inescapable conclusion is that a worldview is self-limiting because there is no logical or rational way to objectively get behind this "final question." To do so would require absolute, objective knowledge of truth (which, by theistic definition, is God).

Conclusion

The first nine premises demonstrate that humans inevitably construct a worldview as part of the thinking process, validating Noebel's statement that, "every individual bases his thoughts, decisions, and actions on a worldview" (Noebel, 1997, p. 1). The final premise simply identifies the worldview's natural limitation. The reason Noebel (1997, p. 1) noted worldviews sometimes "lack consistency" is that people often focus on immediate issues, not bothering to consider that their answers may be incomplete or ultimately even conflicting, as Palmer (1996) noted.

A worldview is the tool used to emulate objectivity in the perception/learning process, and the expansionary nature of that process provides the mechanism generating the worldview. The worldview's root cause is the desire to validate one's understanding and consists of the aggregation of responses to the question ,"How do I understand myself relative to ultimate truth?" Those answers effectively serve as the calibration construct or plumb line describing a person's idea of how his or her paradigm(s) actually correlate with reality. As Geertz succinctly said, it is "their picture of the way things, in sheer actuality are" (cited in Palmer, 1996, p. 114). Furthermore, as a person's worldview is defining what he believes is certain truth, that truth becomes a mirror also defining truth about self, thus defining his self-identity unbounded by time. Consequently, a worldview is a mechanism used for perceiving both reality and self.

The term "worldview" is used often and in many ways, touching every realm of human understanding. However, vague definitions and confused usages often stem from failure to understand what generates it and to appreciate how it defines self. A later paper will address contemporary apologetic usages of the term, demonstrating that most subdivide the global self-awareness concept to address specific aspects of personal understanding and that sound definitions are all traceable to the global question: "How do I understand myself in relation to ultimate reality?"

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