

ON BELIEF SYSTEMS

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ABSTRACT

Three questions drive this paper: 1) what constitutes a belief system, 2) what standards can we use to evaluate belief systems, and 3) can competing belief systems co-exist and cooperate with modern science and technology for the benefit of humankind?

Starting with a definition of *belief system*, we juxtapose it with the related terms of *world view*, *paradigm*, and *model*. Wendell Johnson enters the treatise with his simple, poignant idea of “to-me-ness,” which fits in easily with the constructivist philosophy of knowledge acquisition. We then cover three standards we can employ to evaluate logic-derived belief systems. We treat revelation-derived belief systems as a special case. Both logic-derived and revelation-derived belief systems can succumb to fundamentalist disease. Finally, the author drops his impartiality and offers opinionated advice on helping humankind navigate the road ahead.

1. WHAT CONSTITUTES A SYSTEM OF BELIEFS?

Nothing does. The verb “constitutes” fails in its attempt to circumvent the verb “to be” (as in “What *is* a system of beliefs?”). Both questions imply that the words “system of beliefs” refer to an entity that exists independently of us and has a natural structure of some kind. But words don’t mean...PEOPLE mean. To-me-ness:

Wendell Johnson: “A scientifically oriented person exhibits a high degree of to-me-ness in his use of language.”¹

So I rephrase the question to state, “What shall the term ‘belief system’ mean *to me* here?” I don’t engage in this G.S.-primer-approach out of cuteness. Rather, I do so because the distinction between *discovering* the “truth” (as in “something is...”) and *constructing* it (as in “I hold that...”) serves as a foundation from which we can step to a meta-level above belief systems to tinker with them in order to make conflicting ones compatible. Seeing a belief system as a humanly constructed concept gives me, as a human, the right to step above it and tinker.

I’ll start with my definition of “belief.” [Forgive my regular use of “I.” Wendell made me do it.] Merriam Webster’s Collegiate Dictionary (10th Edition) says of *belief*, “1: a state or habit of mind in which trust or confidence is placed in some person or thing.” I don’t even have to go to “2:” That will do fine. *Belief* involves *confidence* in one’s mind that a person or thing or concept deserves one’s attributing to it validity or merit of some sort. In other words, we can define *belief* as a “buy-in.” One can buy into Sir Isaac’s law of gravity or to Mohammed as Allah’s prophet.

Let me distinguish *belief* from *knowledge*, the latter producing a confidence level of 100%. By this definition, *beliefs* would vary in degree by levels of confidence (low, medium, high, etc.) whereas *knowledge* would portray but one degree: complete certainty. Where might we find this

¹W. Johnson, People In Quandries, 1946, p. 61

complete certainty...this confidence level of 100%? In science? No:

James Burke: “In spite of its claims, science offers no method or universal explanation of reality adequate for all time.”ⁱⁱ

Martin Gardner: “There is no scientific theory today, not even a law, that may not be modified or discarded tomorrow.”ⁱⁱⁱ

John Casti: “...there are no universal, absolute, unchangeable ‘truths’ in science.”^{iv}

William Poundstone: “You might wonder when you can conclude that something is established beyond all doubt. The answer is: never.”^v

The philosopher Richard Rorty acknowledges this by using phrases like “I one-quarter know...” and “I three-quarters know...”

In other words, science depends upon numerous people buying into various statements/propositions/hypotheses by attributing validity to them to one degree or another. But using this definition, we cannot distinguish between science, politics, religion, and cooking. Each has its competing recipes people variously buy into, and the recipes’ differences cause adherents to cry out, “Let the games begin!” and they then disturb the peace of the planet.

If we can agree upon *belief system* and *system of belief* as arbitrary-but-useful-to-me terms, we should also welcome to the fold terms such as *model*, *paradigm*, and *world view*.

To me, the term *model* will refer to the lowest level, most discrete referencing of a portion of reality. Thirty-two-feet-per-second-squared exemplifies, to me, a *model* – the lowest, most discrete representation of the force of gravity – its acceleration rate.

Moving up the scale of generalization, we come to Newton’s assumptions about speed and acceleration (time and distance as absolute) vs. Einstein’s (time and distance as relative) and we have two *paradigms* (absolute vs. relative) into which we can subordinate the 32-feet-per-second squared *model*.

Move up another notch to *world views*, of which I see two major contenders: modernism (we can discover an absolute truth) and post-modernism (we cannot discover an absolute truth). Both Newton’s and Einstein’s paradigms fit nicely into the modernist world view, but quantum physics has to be shoe-horned in because of its post-modernist implications – which tells us that modernism and postmodernism don’t constitute a clear dichotomy. Of course they don’t. We just invented those two terms!

I define *belief systems* (and the unnecessary *system of beliefs*) as a step above *world views*. Both

ⁱⁱJ. Burke, The Day the Universe Changed, 1985, p.337

ⁱⁱⁱM. Gardner, The New Ambidextrous Universe, 1990, p.335

^{iv}J. Casti, Paradigms Lost, 1989, p.12

^vW. Poundstone, Labyrinths of Reason, 1988, p.141

the modernist and postmodernist world views involve logic as a way of knowing. Revelation plays a role in neither. But we justify some beliefs (e.g., religious and aesthetic) based upon “knowledge” that comes to us not from words/thinking/logic but rather from levels of confidence or ahah!s created by seemingly out-of-our-mind sources...moments of indescribable clarity...of awarenesses which we buy into 100% but can’t explain very well to others. So, to me, *belief system* includes both logic-derived world views and revelation-derived “knowledge.”

Thus we have constructed a taxonomy of belief:

Belief System
World View
Paradigm
Model

I construct these classifications as arbitrary, relative, and not mutually exclusive.

2. DO STANDARDS EXIST FOR EVALUATING DIFFERENT BELIEF SYSTEMS?

Science has hammered out standards/criteria for evaluating theories, hypotheses, laws, et al. They include:

- method of constructing: deduction and/or induction
- falsifiability (a la Popper)
- symmetry (a la Weinberg)
- simplicity (a la Occam)
- beauty
- fit with other accepted theories, laws, etc.
- fit with results of experiments
- replicability of those experiments
- concurrence of the scientific community, etc.

I buy into the *constructivist paradigm* within the *postmodernist world view*, which posits that we construct new models and then fit them into our previously constructed body of knowledge, like an engineer might install a new component into an existing piece of machinery. As standards for the installation, the engineer uses *form*, *fit*, and *function*. Does the component 1) have simplicity of design (*form*), 2) fit into the pre-existing machinery well (*fit*), and 3) work (*function*)? So when we learn (install a new piece of knowledge into our mind’s pre-existing knowledge structure) I evaluate that installation with the standards of *form*, *fit*, and *function*. Does the new concept carry Occam’s simplicity (form), mesh well with the previous knowledge (fit), and work for me (function)?

These criteria/standards work well with all logic-derived elements within a *belief system* because they, too, derive from logic. We *construct* those standards as we *construct* the knowledge they evaluate. The standards do not impose an artificial absoluteness (either-or). Rather, they highlight the *degree* of buy-in (confidence level) appropriate TO ME.

And they fail us in matters of revelation. In fact, I cannot conceive of a logical standard to use in evaluating revelation-derived knowledge. What might it require? That the candlepower of the vision meet a minimum quantity? That the ahah! last a minimum number of days, months, or

years? Revelations seem refractory to logical evaluation. We can judge logic-derived belief systems with logic-derived standards. Perhaps we can only judge revelation-derived belief systems with revelation-derived standards. And that would mean both transactions...the revelation and its evaluation, will occur within the mind of one, single individual. To everyone else they will seem as hearsay.

3. CAN HOLDERS OF COMPETING BELIEF SYSTEMS MUTUALLY CO-EXIST AND/OR COOPERATE WITH MODERN SCIENCE AND TECHNOLOGY FOR THE BENEFIT OF HUMANKIND?

Despite the above quotes about the non-absoluteness of science's knowledge, numerous people, scientific and lay alike, believe that science has achieved a confidence of 100% in certain laws, theories, etc. Because they feel we have uncovered the fundamental truths about reality (like "fundamental particles"), let me label them "fundamentalists." They own the "right" knowledge and those who don't share it suffer from ignorance. Please recognize, however, that "fundamentalists" don't exist (just as so-called "terrorists" will label themselves as "freedom fighters"). I use the term to arbitrarily denote a tendency (perhaps within all of us to one degree or another) to think, with pride, that we have achieved the absolute truth.

Those who claim revelation-derived knowledge can also migrate into fundamentalism...perhaps even more so. I have no problem with revelation-based knowledge. Tchaikovsky just wiggled his quill and the music "came from somewhere." We probably have very active subconscious processes that mull over various inputs while we do other things, then spring their conclusions on us in flashes of light (sometimes with the help of chemical stimulants). My problem commences when revelation turns into fundamentalism ("I have the right revelation, you have a wrong one, therefore you die!")

The owners of revelation also have a problem: how to tell us about it. The moment they choose words to describe it, they enter the domain of general semantics. The words and word-systems they select to describe their epiphanies suffer from the imperfections of denoting, connoting, translating, hermeneutics, non-allness, reification, et al. While the revelation might have seemed beautiful, the telling of it will degrade to Rube Goldberg, ad hoc, jury-rigged approximations: "Let me tell you about 'Thou shalt not kill.' It has lots of exceptions, like accidentally stepping on bugs and defending your country, and..." The revelatee cannot transfer the beauty of his experience to us. Instead, we will receive the same ol' same ol': words.

Within all the logic-derived belief systems, world views, paradigms, and models, the cooperation we seek "for the benefit of mankind" has a major enemy: fundamentalist hubris. If the participants adopt Wendell Johnson's to-me-ness humility, they have hope for negotiating through any conflicts between knowledge structures – even those Donald Davidson describes as "incommensurable." As a matter of fact, the success of science has thrived on that constructive conflict: alchemy giving way to the mathematics of determinism, which has softened its stance with relativity, quantum indeterminacy, chaos theory, and who knows what next (superstrings?)

People who espouse Wendell Johnson's epistemological humility with the simple phrase "to-me" can negotiate humankind into reasonableness...both in the sense of using reason (logic) and achieving reasonable, balanced progress.

Should we have hope for humankind's road ahead? Yes. But the fulfillment of that hope will depend upon humility, with fundamentalism (in science, politics, religion, or cooking) as the main roadblock. Because I am optimistic, I view fundamentalism not as an end-of-the-road chasm, but rather as a speed bump. Our species has overcome fundamentalist after fundamentalist over the course of history. When sincere, humble seekers engaged in the good fight of honing their knowledge structures, the fundamentalists, those who were intolerantly persecuting "the wrongness of the heretics," became, themselves, the casualties along that road, unmasked as epistemological bullies.

How will humility gain the upper hand (if it hasn't already)? By sincere folks keeping their minds open to new models, paradigms, world views, and belief systems. By championing their positions in the good fight...and winning and (yes!) even losing the frays. By people debating the subject of belief systems in general. By meetings just like this, all over the world.
