METARELIGION AS THE HUMAN SINGULARITY¹

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ABSTRACT: Based on the author's notes for a presentation to the Foundations of Mind group in October of 2017, this paper examines the role of metareligion in obtaining a favorable outcome for the human species as it approaches a Singularity with both Human and Technological aspects. For limited technical background, please consult two of the author's previous papers (Langan, 2002, 2017).

KEYWORDS: Cognitive Theoretic Model of the Universe; CTMU; Dualism; Metareligion; Singularity

THE MEANING AND PURPOSE OF SPIRITUALITY AND RELIGION

Man has always craved knowledge of his own identity. Human identity is coherent, existing as a unified whole, without gaps or breaks that might interrupt the connection between its various parts and aspects. If human identity were ultimately pluralistic – e.g., dualistic, existing in two essential or fundamental parts - then the equally fundamental gap between the parts would destroy its continuity, rendering it dissociative and pathological.

To understand his own identity, man requires a coherent and therefore monic self-

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model reflecting its psychological coherence and relating it to all levels of reality. That is, man requires a valid interpretation of the human individual in society, and of the individual and society in reality at large. This interpretation must take the form of an unbroken correspondence spanning the extended relationship between man, as an inhabitant of reality, and reality in its most basic and universal form; man must see himself as an integral part of reality, and reality as an extension of his own being within a single unified ontology or metaphysics. In short, man and reality must share a common metaphysical identity.

Where metaphysics is a language expressing the relationship between mental and physical reality, spirituality can be understood as the metaphysical essence of human identity, and religion as its organizational manifestation. In its various benign forms, religion provides man with self-understanding and a sense of community ... a model of the individual and his or her relationship to other people, society, and reality at large. Religion tells people who they are, and mankind what it is, by establishing their relationship to the global environment on the spiritual level; it is a binary relationship of man to his real environment, and where the global environment of each human being includes all others, the relationship of mankind to itself.

The spiritual model of self, the extended man-reality relationship required by religion, is thus a stratification of human identity from the individual to ultimate reality, the level of reality that cannot be explained in terms of anything prior to itself or any sort of exterior embedment. This follows from the fact that man is embedded in reality and thus shares all of its most general and ubiquitous properties, up to human limitations of structure and dynamics. Parallel to this degree of extension is the outward extension of self that is sought in certain Asian religious traditions; the self becomes ever more expansive as its hidden depths are plumbed.

But here we must note that the phrase "ultimate reality" is necessarily a partial description of God, incorporated in the (otherwise variously defined) identity of all viable monotheistic religions. Any God *not* incorporating ultimate reality could exist only in a properly inclusive reality partially beyond His influence and creative power, and would thus come up short in virtually every major strain of monotheism. On the other hand, this description holds regardless of any more specific properties incorporated in various definitions of God.

DUALISM: REALITY TORN IN TWO

In mainstream social and economic theory, a human being is understood as a mechanistic automaton driven by individual self-interest and governed by impersonal laws of nature and rules of behaviorism. Human automata are subject to conditioning on the basis of individual self-interest, which is a function of the individual's pleasure and happiness, freedom from want, pain, and sadness, and standards of biological fitness including survival and reproduction, all of which inhabit a standardized economy with a monetary metric. Man is thus simplistically viewed as an economic agent subject to monetary control, through centralization of which the entire future of mankind can in principle be mechanistically determined by the calculated pushing of buttons. Obviously, this dualistic view of man represents a complete negation of human dignity and sovereignty, reducing the human race to cattle. It is also incompatible with any kind of religion other than that referred to by Marx as an "opiate of the masses".

Dualism is usually associated with the French philosopher Rene Descartes. Cartesian dualism, which has several more or less equivalent formulations, simply asserts the mutual exclusion of mind and matter on the strength of an apparent absence of a connection or overlap between them. On the other hand, avoiding it is not quite as simple, for this would seem to require a conceptual framework which differs in certain counterintuitive ways from our usual picture of the world. In order to avoid having to cope with these differences, it is much easier to simply detour around them, which puts one back on the main road and saves one from having to do any steep or lonely climbing.

The historical persistence of Cartesian dualism may have something to do with another innovation of Descartes, Cartesian analytic geometry (independently invented by Fermat), which utterly permeates the scientific landscape. Analytic geometry defines and depicts space in such a way that it excludes anything which cannot be completely represented as a set of coordinates defined along a linear trajectory, with or without various objective properties attached. In particular, the mental and spiritual aspects of conscious subjects are excluded from physical spaces and thus separated from the objective, observable contents thereof.

Whereas religion must connect human beings to all levels of human identity up to and including reality at large (the entirety of which is understood to be spanned by the presence, knowledge, and creative power of God), thus in effect defining the human soul by way of the connection, Cartesian dualism cuts the soul in two, setting man adrift from physical reality and pitting science and religion against each other. Dualism fundamentally divides the world, leading to a seemingly endless sequence of futile attempts to patch it back together.

In short, Cartesian dualism is inconsistent with the spiritual connectivity demanded of religion, and thus makes religion inconsistent with empirical and mathematical science. Neither can be expressed in terms of the other, and we arrive at the variant of Cartesian dualism referred to (first by Stephen Jay Gould in 1997) as "non-overlapping magisteria" (NOMA). Yet science and religion both claim truth, and therefore have a common requirement: conformance to logic, i.e., to the structure of truth. Thus, restoring the coherence and consistency of religion requires its embedment in a high-level formulation of logic (truth-structure) which also accommodates the theoretical, observational, and methodological aspects of science.

SPIRITUALITY AND THE CRISIS OF HUMAN IDENTITY

Dualism has precipitated a dualistic and therefore dissociative crisis of human identity which, by impeding the spiritual level of human self-identification, amounts to a crisis of spirituality. This crisis has metastasized into the socio-political and economic realms, where philosophical dualism has been cynically and sometimes catastrophically exploited. Even as people are assured that their interests are of primary importance by government, corporate, and institutional leaders, they are more often viewed and treated as common and therefore disposable stimulus-response machines, of no greater value than other readily available forms of matter.

Societies are cybernetic; they are control-and-communication feedback loops in which top-down control tends to increase over time. Absent religious opposition, governments increasingly behave like malevolent egregores, using secrecy, disinformation, indoctrination, coercion, and conditioning to control their citizens. Even religion itself may be used to such ends; for example, ecumenical and interfaith conferences and councils nominally dedicated to a millennial religious reformation or synthesis may be controlled by those preferring to *shape* human identity rather than *comprehend* it ... to "remodel" man at their administrative or personal convenience. Secular control, facilitated by mutual suppression of divergent ideologies, masquerades as religious unification in the absence of coherent scientific, philosophical, or theological opposition.

Unfortunately, organized religion finds itself without a counterargument. Present approaches to religion and religious scripture instantiate dualism on the level of both theory and model; a scriptural language, subjectively internalized by adherents, is set apart from its objective content. The minds which endow the language with meaning are set apart from material reality, and somewhat oxymoronically, the intervening gap is *spanned* by a *separative* model or interpretative mapping. That the model itself is implicitly associated with mind, and that mind is thus present on both ends of the mapping, goes unrealized and unacknowledged.

As one might expect by its dependence on those who fund and control it, academia has been recruited to their cause. The dominant worldview in academia is another form of dualism called *naturalism*, a term which is synonymous in some contexts with *atheism* and *secularism*. *Methodological* naturalism excludes the supernatural or

metaphysical from the content and methodology of science, while *metaphysical* naturalism oxymoronically excludes metaphysics from all of existence, presumably on the strength of some unspecified (and in fact, logically impossible) "physical ontology" which lets existence be confined to the physical or observable realm.

Obviously, neither kind of naturalism is consistent with spirituality and religion. Human beings invest religion with positive feelings, emotions, and expectations based on truth-claims which require it to have real-world content related to the formation and actualization of human purpose and destiny. Religion must therefore describe not a mere *object* of hope, but a verifiable *basis* of hope. Naturalism, being dualistic, excludes human identity from reality, depriving the spiritual imperative of coherent self-identification.

As metaphysical naturalism (physical monism) undermines spiritual cohesion, religion declines. The separation of church and state, originally meant to safeguard the freedom of the people to worship as desired, now often seems to be misinterpreted as freedom of the state from religious competition for the hearts and minds of the populace. In other words, Jefferson's "wall of separation" seems to have been misconstrued as yet another expression of Cartesian dualism, portending and falsely justifying an anti-religious secular pseudo-theocracy which threatens to displace true spirituality from its previous role in human self-identification and the formation of human destiny.

DUAL SINGULARITIES

For present purposes, a "singularity" is a point at which a system must undergo a directional break, jump through a limit, or be redefined in order to survive regardless of how it may evolve before or after. Accordingly, it can be understood as a kind of systemic destiny, an inevitable convergence of possible paths or trajectories of systemic evolution. Paths converge on points, and where such a point marks a sharp change in the smooth overall trajectory of a system, it comprises a kind of systemic "metapoint" which can be seen as marking a systemic mutation or change of inertia. This provides a tentative mathematical conceptualization of "singularity" for social systems.

The related forms of dualism thus far discussed - Cartesian dualism, naturalism, NOMA, and so on - are opposed to the human need for a coherent spiritual identity. This implies a bifurcation or divergence, a human evolutionary choice between two possible adaptations or destinies respectively corresponding to the anthropic and technological aspects of an impending "singular" transformation. Each possible destiny corresponds to the dominance of one aspect over the other, and may be associated with its own conventional type of singularity.

On one side is the **Human Singularity**, a mass realization of the expansive spiritual identity of the human species. Basically, this is the mass spiritual awakening that we have been led to expect by, e.g., certain currents in "New Age" thought. The prototype for this kind of singularity is the Omega Point of Pierre Teilhard de Chardin, representing an evolutionary terminus and divine spiritual unification event through which mankind, and reality itself, will achieve "Christ-Consciousness" and be forever transformed. (After its introduction by Teilhard, the concept was developed by various authors, ironically including a few science-oriented, ostensibly tech-minded authors like Frank Tipler and David Deutsch.)

On the other side is the **Tech Singularity**, seminally formulated by the celebrated mathematician John von Neumann as the approaching juncture at which "technological progress will become incomprehensively rapid and complicated", prior to which "the ever-accelerating progress of technology ... gives the appearance of approaching some essential *singularity* [italicized for emphasis] in the history of the race beyond which human affairs, as we know them, could not continue" (Ulam, 1958). In short, von Neumann foresaw an uncontrollable technological quickening, a sudden acceleration of complexity followed by the transformation (or extinction) of humanity.

Most discussions of the Tech Singularity have been naive to the point of disingenuity, boiling down to starry-eyed encomiums to the power of human intelligence to inventively couple with reality on the physical level of being using technological marvels both real and imagined, including implants, prosthetics, genetic engineering, virtual realities, and above all, a merging of human intelligence with AI. The problem with such discussions is that they seem to inhabit a socioeconomic and political vacuum, whereas in fact, the singularity concept is fraught with worrisome complications involving economic and sociopolitical factors apart from which it cannot be properly evaluated.

The Human and Tech Singularities relate to each other by a kind of duality; the former is extended and spacelike, representing the even distribution of spiritual and intellectual resources over the whole of mankind, while the latter is a compact, pointlike concentration of all resources in the hands of just those who can afford full access to the best and most advanced technology. Being opposed to each other with respect to the distribution of the resources of social evolution, they are also opposed with respect to the structure of society; symmetric distribution of the capacity for effective governance corresponds to a social order based on individual freedom and responsibility, while extreme concentration of the means of governance leads to a centralized, hive-like system at the center of which resides an oligarchic concentration of wealth and power, with increasing scarcity elsewhere due to the addictive, selfreinforcing nature of privilege. (Note that this differs from the usual understanding of individualism, which is ordinarily associated with capitalism and juxtaposed with collectivism; in fact, both capitalism and collectivism, as they are monopolistically practiced on the national and global scales, lead to oligarchy and a loss of individuality for the vast majority of people. A Human Singularity is something else entirely, empowering individuals rather than facilitating their disempowerment.)

The existence of two possible singularities presupposes a point of bifurcation or divergence beyond which the evolutionary momentum of mankind must carry it. Presently, all of the momentum belongs to the Tech Singularity; it is preferred by the financial, corporate, and governmental interests which drive the general economy. This momentum is reinforced by the seeming unavailability of alternatives, i.e., the nonexistence of any other track onto which society might be steered in order to escape an oligarchical AI lockdown. It is one thing for humankind to awaken *en masse* to its impending enslavement through a seemingly inevitable Tech Singularity; it is quite another to have a superior alternative clearly in view.

In order to reach any alternate destination whatsoever, humanity must understand what has been driving it toward the Tech Singularity. At this point, the reason is clear: the virtually automatic concentration of wealth and power, which has been observed to occur under both capitalism and socialism, fractionates humanity into an overclass and an underclass between which all else is crushed out of existence as though by the jaws of a vise. That is, the top and bottom levels of society become the jaws of a vise which, due to the screwing down of the upper jaw against the anvil-like lower jaw, crushes the middle class and all meaningful competition out of existence, thus normalizing the hive through the economic, physical, and psychological standardization of its drones and workers.

For reasons that should by now be evident, let us call this process a "parasitic divergence" – i.e., an organized divergence of humanity into a parasitic overclass and a relatively impoverished underclass serving as its mind-controlled host, mirroring the gruesome effects of certain obligate parasites on the organisms they attack - and acknowledge that it is driven by the self-reinforcing and therefore accelerating acquisition of wealth, power, and technological control by the rich. Left to run away with itself, this process ultimately leads to a "singular" concentration of wealth and power ... a kind of sociopolitical-economic "black hole" that never stops gravitating. As the top jaw of the vise grows smaller, denser, and stronger, the bottom jaw grows larger and weaker; and as human utility becomes increasingly concentrated, every significant increase in the wealth of the overclass translates into a greater amount of misery for the underclass, arbitrarily diminishing the net utility of mankind.

Parasitic divergences have occurred many times in history, but the present one is different. Due to the double whammy of globalization and powerful surveillance and coercion technology, the one now in progress is geographically ubiquitous and quite possibly irreversible. If humanity is to save itself from the insectile, hive-like future associated with a Tech Singularity, the Human Singularity must prevail, empowering mankind to exert sufficient control over the production, distribution, and application of technology to prevent its unlimited oligarchical abuse. To bring this about, it is not enough to merely distribute a cognitive avoidance mechanism out of which the moneyed elite can buy and bribe their way as usual, given the absence of a welldefined alternative direction in which humanity can proceed; rather, an alternative direction must be defined and universally distributed in cognitive and attitudinal form.

In short, in order to have a meaningful mass awakening, the content of the awakening must be defined and distributed to the members of humanity, thus immunizing them against parasitic mind control. Because this content must be spiritual, the involvement of religion is unavoidable.

21ST CENTURY METAPHYSICS AS METARELIGION

Thus are we presented with an existential choice of singularities ... a choice on which our future certainly depends. These dual singularities, Human and Tech, respectively correspond to spiritual monism, the self-dual unification of humanity in a common spiritual identity spanning all of reality, and physical or material monism, the terminal mechanization and de-spiritualization of human identity. For the sake of humanity, spirituality must triumph; yet religion as we know it is not only under withering attack by the forces of secularism, but lacks the conceptual wherewithal to overcome Cartesian dualism and reunite with the scientific and technological aspect of reality.

Religions evolve in coupling with cultures, conventions, and morals that come into real-world conflict with each other and/or the state, with the result that religions themselves conflict in all of these ways. Obviously, a mass spiritual awakening requires a means of resolving these conflicts. Suggestions include segregating religions, allowing or encouraging a single religion to become everywhere dominant, playing different religions off against each other in a strategy of mutual containment, merging religions by syncretism (collecting their respective beliefs and rituals under one aegis), and eliminating religion entirely. But there is another more promising option: unifying internally consistent religions in a well-structured *metareligion*, i.e., a theological relationship among religions which provides their valid truth claims with logical support.

By virtue of the functionality of this relationship, its structure is that of a language.

Like theories of science, religions themselves are languages; specifically, they are scriptural and doctrinal languages taking as their content a single shared reality including not only the physical universe, but subjective beliefs, codes of behavior, and notions of the sacred arising therein. This implies that a metareligion is a comprehensive metalanguage of religious languages. However, to exceed the limitations of dualism and couple with science, this religious metalanguage must also be scientific in bearing. In fact, it must bring spirituality and science into contact on all scales of reference. How is this to be accomplished?

All intelligible languages include logic as a syntactic ingredient, which means that ostensibly independent languages share common syntax and are merely parallel aspects of one all-encompassing language, namely logic itself. This implies that a sufficiently powerful formulation of logic comprises a common language for science and religion alike, and can thus function as a bridge between them and their respective symbolic and semiotic aspects. But standard predicate logic is itself understood as a dualistic language; although it links attributes and objects together in attributions, it does so on a weak and tentative basis. Whatever it attributes to real-world content can be ascertained only with respect to more or less arbitrary axioms and/or by empirical confirmation. What can be done to defeat this requirement, thus transforming linguistic dualism into linguistic self-duality?

Languages are conventionally defined as complex attributes of their universes of discourse. By definition, they are dualistically separated from their universes just as an attribute is abstractly separated from that to which it is assigned by predicate-logical quantification. Yet languages take their universes as content, which contradicts the dualistic premise that they are separate. Like all conventional languages, religious (scriptural and doctrinal) languages are dualistic and thus conflicted; they are implicitly held apart from their universes even while taking them as content. Similarly, standard theology - a metalanguage for the analysis and comparison of religious languages which form its content (and for that matter, from God). This implicit dualism renders standard religious and theological languages fundamentally incapable of expressing the spiritual unity of man and nature. To eliminate the dualistic separation of languages and their universes, dualism must be formally eliminated from the intrinsic structure of language.

The fact that all intelligible languages include logic as a syntactic ingredient implies that a sufficiently powerful formulation of logic comprises a common language for both science and religion, where "a sufficiently powerful formulation of logic" expresses logic on a metaphysical level appropriate to its application to reality as a whole. This amounts to the requirement that it be a *supertautology*, i.e., a metaphysical analogue of logical tautology which employs logic as the identificative syntax of a generic reflexive identification operator. Supertautology describes the structure of an ontological and epistemological metalanguage bearing description as "metaphysics" in the sense required for a true understanding of spirituality and religion.

As usually considered, there are just two basic kinds of science: empirical science, relying on causal inference described by general "laws of nature", and mathematical (logical, linguistic) science, using substitution in formal (axiomatic or grammatical) systems. Although they operate in ways that are superficially dissimilar, they are nonetheless inseparable; the theoretical aspect of empirical science depends on formal inference, a *mental process* occurring in the minds of mathematicians and scientists who actualize it using brains which obey *laws of causation*. In order to deal with the mutual dependency relationship between mathematical and observational reality, we require a higher level of science which includes both empirical and mathematical science, but is more powerful than either in how it relates them.

Causal inference is interactive and linear; events are predicted from prior events occurring along timelines. Formal inference is derivational; specific relationships are substituted for more general ones (or vice versa) irrespective of temporal priority. A supertautology evolves self-dually or "metaformally", in a way that couples formal and causal evolution. This is the proper mode of evolution of an ontological metalanguage capable of not only supporting causation, but of justifying existence, including its own existence, without the help of any other language. Metaformal inference, elsewhere referred to as "telic causation", properly includes both formal and causal inference as aspects; thus, it supports both generative origination and causal evolution, and can be understood as a higher mode of inference embracing logical deduction, empirical induction, and metalogical reasoning about reality as a whole.

There already exists a branch of logic, *model theory*, that deals with the interpretation of empirical phenomena in theories and the mathematical structures of which they consist, but its standard formulation is dualistic. It now has a reflexive self-dual extension called the *Cognitive Theoretic Model of the Universe* (CTMU; Langan, 2002), or as some have called it in more traditional and religiously loaded terms, *Logos*, mainly in recognition of its status as a metaphysical formulation of logic. Technically, the CTMU is a reflexive, high-level kind of model theory designed to support the description of reality on the ontological level of discourse ... the level on which reality *exists* independently of anything external.

On this level and all of those beneath, the supertautological structure of the CTMU is virtually unassailable. Just as standard logic requires no assumptions, neither

does the CTMU; it requires only the cognitive and perceptual faculties that we are given from birth. And because the CTMU is intrinsically valid in a way that empirical science alone is not, it supports the expression and development of scientific truth in a self-dual (nondualistic) conceptual environment. As a metaformal ontology which replaces dualism with self-duality, the CTMU can be viewed as the outcome of what might be called the "Metaformalist Program" in the joint foundations of science and mathematics.

To model religious languages on the appropriate metaphysical level of logic and consistently express their interrelationships, the CTMU employs a *trialic* metalogical language which constitutes its own universe and its own model, and is thus capable of autonomously validating certain religious claims of truth and consistency. In effect, this language comprises the "metascripture" of a verific and potentially unificative metareligion. Its supertautological structure is that of a *Self-Configuring Self-Processing Language* (SCSPL) exhibiting referential closure and thus reflecting the structure of the self-contained, self-sufficient reality in which we live. Encoding the relationship between man and Deity, humankind and the metaphysical structure of reality, it is the only valid basis for eliminating the existential confusion and religious conflict that threatens our world without sacrificing that which makes us human.

CONCLUSION

Despite the fact that an elementary formulation of the CTMU has elicited relatively little academic interest after nearly three decades since its introduction, it is natural to ask how it is likely to impact the intellectual environment. Perhaps the most profound change in our worldview will come from learning that living, breathing human beings are essential and logically necessary ingredients of reality, not just "emergent phenomena" which "supervene" on brute physical processes. In the CTMU, human beings comprise a class of entities with a very specific mathematical formulation and an essential role in the structure and dynamics of reality. Once this role is properly understood, the spiritual and scientific realms fall back together of their own gravity.

In academia – which suffers from closure and a preference for intellectual orthodoxy over profound conceptual innovation – this realization will be characteristically retarded. For mathematics and the hard sciences, it will probably be mostly business as usual, especially at first; this is because in their current forms, both already have places in the CTMU. That is, pure mathematics inhabits SCSPL syntax, while science inhabits the *linear-ectomorphic semimodel* of the CTMU as a physical limit (ignoring for now the relationship between the syntax and the limit). For "softer" and more amorphous sciences which do not enjoy rigorous mathematical theories that

compensate for their lack of solid conceptual foundations, the benefits may be more readily felt, at least among those who have not been locked into academic naturalism. Philosophy and theology have the greatest potential to undergo more immediate change; at any rate, it will no longer be possible to rationally dismiss the metaphysical aspect of reality or its implications, or to concoct *ad hoc* rationalizations based on relativism and existential ambiguity. Meanwhile, the emergence of a common foundational language for all of these disciplines will probably be only gradually realized.

As for religion, believers of which often languish under the crushing weight of orthodoxy and peer pressure, a whole new level of courage and open-mindedness will be required. But fortunately, perhaps as an unintended consequence of the steady erosion of religious dogma, many minds have already opened enough to accommodate a greatly enriched understanding of spirituality. Let us hope that there are enough of them to help us attain the Human Singularity, and redeem mankind from its otherwise gloomy and potentially catastrophic future.

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