

COSMOLOGY OF THE IDEA IN BRIEF  
WITH CONCLUDING REMARKS ON  
THE RAGEFUL 'SPIRITUS MUNDI'  
JULY 2014

The “color vacuum” (the protonic interior), along with its counterpart the “white vacuum” (the so-called “ordinary vacuum of space”), are only two of the three great components of universal natural being. It is necessary to hypothesize, in addition, a universal *negative unity* with reference to them, to explain, among other things, the great conundrum of inertial mass first posed by Kepler.

Taken together, these three sides of the magnificent cosmos in which the human race takes its rise are all that is necessary to account for *inertial mass*, *gravitational mass*, *consciousness* (universal awareness) (see the paper ‘The Origin of Consciousness’), *thermal motion* and its opposite, *living motion* (see the paper ‘Music and the Great Chain of Being’), plus the mysterious phenomenon of “*non-locality*” (see below).

The idealist concept of *negative unity* was used systematically in the 19th century by the great German scientist-philosopher G.W.F. Hegel in his ‘Philosophy of Nature’ to explain higher-level coordinations of natural phenomena. Thus, Hegel defined the psyche as *the negative unity of three processes*, referring to organismal self-relation, relation to environment, and relation to the genus (in reproductive affairs).

Hence, a universal negative unity is a fitting hypothesis to explain inertial mass, especially as discussed in the 20th century by the first-rank cosmologist Dennis Sciama (‘Physical Foundations of General Relativity’), since the only thing needed to validate Prof. Sciama’s clever sketch of universal inertial mass relation is a *true negative unity* to connect masses (or really mass-energy) instantaneously, no matter how far apart.

The hypothesis of *negative unity* is also helpful in explaining gravitational motion, which, according to Hegel, represents *a seeking behavior*, as masses seek, but never find (because it is not in finite reality), “a center outside themselves.” That center is the *cosmological negative unity*, which can also serve to validate the famous supposition of Aristotle that there is an *immovable mover* behind cosmological being.

It is convenient, therefore, that gravitational “force” is actually completely discounted in General Relativity (GTR), which states that gravitating bodies move freely without force along “natural geodesics” (although in doing so GTR postulated the physico-mathematical illusion that space and time are somehow “bent” by mass itself; exactly how mass could effect this was not explained).

Here we must pause to insist on our view that space and time are *not things* and cannot, of course, in any reasonable philosophical sense, be subject to “bending.” Nevertheless, this unreasonable concept was widely accepted for lack of an alternative explanation that mechanists and materialists would tolerate. It is, however, false and misleading.

In addition to proposing a single rational solution to the outstanding problems of inertia mass and gravitation, the hypothesis of a *universal negative unity* offers the only explanation, consistent with the subtle facts, for an important quantum-mechanical phenomenon known as “non-locality.” This is current science and intensely argued.

According to the “horns” of an influential physico-mathematical dilemma erected in 1964 by physicist John Bell, quantum events can reveal themselves to be mysteriously “entangled” (correlated) despite lacking any apparent means of communicating, or sharing, their quantum “states” in finite reality. This has become known as “Bell’s Theorem.” Repeated, rigorous investigations have demonstrated its validity.

A recent summary by H. Wiseman on the 50th anniversary of Bell’s Theorem (‘Physics: Bell’s Theorem Still Reverberates,’ *Nature*, 26 Jun 14), noted the usual interpretation--either “reality” is an *illusion* or else fundamental particles can influence each other instantaneously (“non-locally”) even when light years apart. Nescient (mechanistic) science cannot face the latter possibility. (We leave Prof. Wiseman to his own thoughts.)

However, “non-locality” is obviously preferable, and is most easily accommodated by the hypothesis that *microphysical phenomena actually take place in, and receive non-local connection within, the negative unity of the present world*. As noted above, this would make the late Prof. Sciamia’s theory of inertia one of the great achievements of physical thought, which it is.

We note that the validation of the modern theory of inertial mass would simultaneously undermine the “explanation” of mass promoted by a gaggle of impetuous experimentalists who, following a certain Prof. Higgs, on little evidence, assert discovery of a fourth “cosmological field” that “confers” mass mechanically. This represents an unnecessary, and inept, multiplication of entities.

Without such grasping at straws, if we instead adhere the modern theory of inertial mass proposed by Prof. Sciamia, we would vindicate the great Austrian physicist Ernst Mach, whose famous “Mach’s Principle” inspired the originator of General Relativity. And it was the motivation of Prof. Sciamia himself, who knew very well that General Relativity, despite its good intentions, had failed to account for inertial mass.

It is fair to note that neither Mach, nor Einstein, nor Sciama, nor any of the 20th century's subsequent fast-talking investigators of gravitation and inertia (Wheeler, Barbour, etc.) properly credited the great Anglo-Irish subjective idealist George Berkeley (d. 1753), whose original critique of Newton was equal in conceptual power to Mach's. It should be called *Berkeley's Principle*.

By the way, what is Mach's Principle? Simply a magnificent thought experiment, in which the entire universe around a spinning object suddenly is made to *disappear*. What happens to angular momentum (experienced as centrifugal "force") when there remains nothing to prove that something is *spinning*? The inexorable conclusion is reached: *Mass here is somehow connected with mass there*. The acute Bishop Berkeley noticed the same problem in Newton's work. Prof. Sciama, as mentioned above, beautifully investigates the true connection.

The concept of *universal negative unity* also lends support to the suspicion that, in view of the longstanding failure of theorists to reconcile quantum and classical physics, there must be a *universal distinction* between microphysics and macrophysics. More and more 21st century physicists are calling for this (cf. 'Quandrum,' *Nature*, 18 Jun 14).

We must leave out of account for now discussion of the important implications for *cosmogony* resulting from the great discovery of the "color vacuum," which dates from about 1973. Full appreciation of *the physical importance of the color vacuum* should perhaps be credited to the late Prof. Henning Genz ('Nothingness: The Science of Empty Space') of Germany. Most Americans are still mystified by this term.

Towards the end of his interesting book, the German edition of which came out in 1994, Prof. Genz stated that, "like Atlas, the color vacuum holds up the world." It constitutes *a nearly infinite pressure*, the energy of which, alone, could neatly explain the mysterious gravitational phenomena that legions of materialists and mechanists are now seeking to place under bizarre rubrics like "Dark Energy" and "Dark Matter." *The negative unity itself is the negative of a positive and does not represent additional energy*.

We would like to give the reader a rough impression of what the color vacuum is doing merely by its occupation of a physical space within the seemingly limitless "white vacuum" (the vast deep, full of galaxies, that is said to go out to a distance of at least fifteen billion light years in all directions).

According to our armchair calculations, the color vacuum contained in the nucleons of the visible universe ("which, like Atlas, hold up the World," in Prof. Genz's memorable characterization), would actually occupy a continuous volume of space no farther than

the orbit of Mars, if centered on the Sun. Thus, the entire universe in a relative nutshell! How is that for a source of *pressure*?

If this *color vacuum* suddenly disappeared, according to the reasoning of Prof. Genz, the electrons (which are *free projections* of the color charges) would retract, and the visible world would become a veritable nothingness. In other words, the extremely rapid movement and pressure of the primal fields of the color vacuum represents *continuous creation*, a venerable theological dogma, by none other than an Infinite Will.

Despite all this, or perhaps because of it, it appears that no mechanist or materialist physicist in the world has ever inquired into, much less explained, the hugely energetic motion of *the color charges in self-relation* constituting the color vacuum. They are moving at nearly the speed of light and actually, by application of classical physics, including the Special Theory of Relativity (STR), are sufficient to account for *all mass whatsoever* (i.e., mass-energy). This was an original observation of F. Wilczek, the well-known American physicist and Nobel laureate, and we agree with it.

We note that the relativistic (kinetic) mass increase within the color vacuum, as discussed by Prof. Wilczek, like all relativistic mass, *is entirely ideal in origin*, since it depends for its measurement, like all microphysical phenomena, on *an observer*. This constitutes one of the mesmerizing paradoxes of Special Relativity that beguile students of physics even to this day. And it hints at a fundamental connection with quantum mechanics (with its inevitable postulation of observer) that is rarely noted.

Because the mass is measurably *there within what is demonstrably an eternal and infinite world* (this will appear in the main body of our work), we know the color vacuum contains *three absolute observers in acute self-relation*. *This therefore constitutes the first physical proof that the fundamental intuition of Consummate Religion--the Triunity of the Absolute--is correct*. This physical insight alone will inexorably overturn the secular universe.

As for the *rest mass* of the color charges in self-relation, they represent *potential energy*, which also is ideal in origin, since a field's potential energy can only be detected by *another field*. The system of fields in self-relation thus is seen to constitute *a self-disclosing Idea* (cf. the abstract of 'The Idea').

The foregoing hiatus in basic physical theory is all the more incredible, since the activity of the color vacuum constitutes the simplest explanation for mass, consistent with special relativity (STR), as mentioned, and more reasonable by far than the fanciful Higgs hypothesis (discussed above), along with the dubious Higgs cosmological field that it implies.

Let us state clearly our view that the Higgs field, like the illusory “bending” of space and time in GTR (discussed above), constitutes an *illegitimate reification*, an anti-physical, mathematical sleight-of-hand, which, by the admission of its own adherents, was concocted solely to “save the appearances” in the remaining parts of the theory (the so-called “Standard Model”).

A longer discussion would demonstrate clearly that no mechanistic-materialist hypothesis is able to explain inertial mass as conceived by Kepler and Mach. Indeed, it is plainly evident that inertial mass (like gravitation, which is not a “force”) is otherwise unexplained and cannot be other than ideal in origin, given the vast size of the universe. We should note that inertial mass and gravitational mass are of entirely separate origin, according to GTR, though they are exactly equivalent.

Indeed, the so-called Principle of Equivalence, when closely considered, is the very thing to be explained! And this challenge is not addressed by the mechanistic hypotheses criticized above.

Only the hypothesis of a *universal negative unity* is able to bring the ideas of inertial mass and gravitation mass under a unitary conceptual scheme. It is like the problem of the demonstrably exact balance of positive and negative charge. Physicists continually marvel at this, though it is obviously the exactly bifurcated result of the unitary idea that underlies and constitutes electromagnetism. No physicist has noticed this, according to our research. Neglect of philosophy has its price!

If we are correct in our surmise on the existence and importance of the *universal negative unity*, the momentous outstanding question of physics and cosmology left to us by the great Kepler is demonstrably capable of being solved, at least in theory, and at least to a first approximation.

In conclusion, we should note the high pertinence of the venerable but little-understood cosmological concept of *spiritus mundi*.

The reader is cautioned that many conflicting, often partial, ideas have fallen under seemingly coincident rubrics (such as “anima mundi” [Plato] and Hegel’s “Weltgeist”). These are often asserted, quite erroneously, to mean that that the spirit (or mind or soul) of the world is the Absolute Himself. This cannot be so if the World is *a thing created*, a living creature in itself with a mind of its own. A difficult question!

With reference to the foregoing, and because of its cosmological importance, we would like to bring to the reader’s attention our characterization of the deepest such animating

idea involving a “universal world mind” standing apart--as it were--from that of the Creator. This is the conception held by Jacob Boehme (d. 1624) (“JB”), the first philosopher to write in the German language.

If the world is as we hypothesize, i.e., entirely composed of highly active and powerful, but immaterial, fields in self-relation, forming by their activity *a living image* of their Creator (see the abstract of ‘The Idea’), and so representing a spirit (Geist) on its own account, capable--within its vast powers--of pursuing both constructive and destructive independent ends, then perhaps JB’s deepest cosmological idea is correct.

According to JB’s most profound insight, every created spirit was given a will of its own and was brought into being not merely *to exist* but to *live*, according to, and to the limits of, its constituent powers. In the case of the World *as a whole*, these are very considerable. This is deep and (it should be noted) nominally denied by an impressive roster of the world’s geniuses, including Leibniz and Hegel.

Nevertheless, the gnawing question insistently confronted JB in all its starkness: *Why is the world in such conflict with itself?* We could fall back on Heraclitus (d. 475 B.C.) and state that “war” (*strife*) “is the father of all things.” This is essentially Hegel’s thought, in our opinion. Before him, Spinoza (d. 1677) stated the same idea with useful, but still clinical, subtlety: *Each thing is determined by its negative.*

Our understanding of JB’s answer is that the “spiritus mundi” (the willful mind of the finite totality and within each of its organic parts) *wills everything for itself despite itself, and cannot but oppose itself to everything within itself*, seemingly, but not actually, in opposition to the will of its Creator, who demands of His children (but not of His animals, as it were, *self-abnegation and resignation*). In our opinion, properly cogitated, JB’s deep insight is fully reconcilable with Heraclitus and with Hegel, and perhaps even with Leibniz.

Unfortunately for the universe as a whole and for all collectives (nations, etc.) within it, *self-abnegation* is something *only individual humans* can do, and constitutes their infinite difference from the natural-sensual world’s exuberant, ineluctable quest for dominance over every other thing not itself (cf. H. Grunsky’s book on JB in German [1956] or H. Binton’s book ‘The Mystic Will’ [1930]). Cf. also Hegel’s ‘Philosophy of History’ (tr. Sibree, 1857).

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