

LETTERS TO PROGRESS IN PHYSICS**On the Epistemological Nature of Genius and Individual Scientific Creation**

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This brief exposition summarizes a universally over-arching deepening of the epistemology of aesthetics (especially as regards the nature of Genius) as outlined in a particular section of the Author's work on an all-embracing, post-Kantian epistemological theory of Reality and the Universe called "The Surjective Monad Theory of Reality" (SMTR), which generalizes, in the utmost ontological sense, Kantianism, phenomenology, and a paradigm of Reality called "Reflexive Monism" (RM).

Most people, both eruditically trained and untrained, are profoundly mistaken in their belief about the nature of Genius, especially in relation to the mere prevalence of talent and the dominant structure of pedantry (i.e., a dominant world-paradigm of mass-education, as opposed to authentic individual education), the epistemological nature of the so-called "scientific research", and the entire psychologism thereof. By "psychologism", we mean an ultimately solipsistic, super-tautological basis that manages to present science and scientific-technological progress (let alone revolution in the sciences), among others, to the world at large in the image of a homogeneously working contingency of non-independent scientists, political factors, and industrial games, as opposed to single creative individuals in the profoundest sense.

Such a semi-popular image replete with "democratic-spiritism" (not to be confused with democracy in and of itself), which easily captures unassuming, aspiring talents into the underlying system, cannot be denuded for what it is, what it is not, and what is universally, utterly other than it, except by (advances in) epistemology. Until then, the utmost critical attitude towards the world of informative representations (e.g., in the sense of Wittgenstein), if not the most universal nature of philosophy, science, and art, is found among individual epistemic geniuses alone — who know just "what is what" absolutely independently of all "otherness".

In the sense of the post-Kantian epistemological theory of Reality outlined in [1], Genius is indeed not even a "superlative of talent" and is separated from all else by an entire world of noumena. In terms of the ontological, multi-teleological reality alluded to therein, which embraces also the eidetic-noumenal "surject" (or "qualon", which is beyond mere "omnijectivity" and "inter-subjectivity") in addition to the usual reflection ("object"), projection ("subject"), and annihilation ("abject") in a certain domain of epistemological dimensionality ("prefect"), Genius is said to be "noumenal-reflective" ("surjective"), while talent is termed "reflective-projective" ("phenomenal-reflexive"). Thus, by itself, the said epistemological framework qualifies itself as being post-Hegelian in its sector of dialectics: by the very presence of "surjection", Genius is beyond the usual triplicity of thesis,

anti-thesis, and synthesis — and so beyond all multiplicity-dependent, contingent, linear progression.

The universal logic (i.e., meta-logic) thereof, by which our epistemological meta-structure surpasses Kantian philosophy and Socratic-Hegelian dialectics entirely is four-fold, anholonomic, and asymmetric in that the general surjective representation of a universal entity, as regards its "place" in Reality, is as follows:

(without, within, within-the-within, without-the-without).

Thus, for a given complete ontological entity A (and not merely a phenomenologically abstract and concrete entity), there exists the following four-fold eidetic representation:

$$\{A\} = \{A, \text{non-}A, \text{non-non-}A, \text{none of these}\}.$$

The above, being "twice-qualified ontological", is not to be confused with both four-fold phenomenological Buddhist logic (of phenomena embedded in infinite contingency) and Whiteheadian process philosophy. Rather, the first two elements, i.e., A ("without") and non-A ("within") are of the phenomenological level (in the self-dual concrete and abstract sense): given an object of contemplation ("without"), it is impossible to discern its causal, formative "interior" ("within") without considering the abstract contingency (inter-connectedness) of all possible phenomenal existents; while the last two ontologically, surjectively denote Universality ("within-the-within") and Reality ("without-the-without"), respectively. These four constituents are hereby called "ontological categories" for simplicity. Therefore, an entity or instance is called "universal" if and only if it is "four-fold eidetically qualified", and not just "two-fold phenomenologically qualified".

That which is surely universally qualified as such is the Universe itself, for which we have the following representation:

$$\{\text{the Universe}\} = \{\text{the Material Universe, the Abstract Universe, the Universe-in-itself, Reality}\}.$$

Meanwhile, for Thought itself, we have

$$\{\text{Thought}\} = \{\text{Thought, Anti-Thought, Unthought, Reality}\},$$

i.e., the Universe-in-itself corresponds to Unthought (not to be confused arbitrarily with “irrationality”) in the sense that the Universe as Unthought is a direct presentation (“sur-determination”) of Reality and not a mere (phenomenological-reflective) representation, rendering Reality unthinkable in the first place, and so it is beyond both the Material Universe and the Abstract Universe, which are the domains of the traditional sciences (with respect to which, therefore, progress always seems endlessly “infinite”). Note that, especially when an arbitrary “thought” other than a “truly universal thought” (peculiar to Genius) is considered, “thought” and “anti-thought” always exist in a single phenomenological contingency while their directions of causality (“momenta”) differ.

This way, the Cartesian dictum, “I think therefore I am”, should be replaced by a twice-qualified ontological thinker (and universal observer) as follows: “I think therefore I am, I am not, I am not-not, and none of these”.

Accordingly, Reality is such that: 1. It is One-Singular and cannot be reduced to Unreality simply because “Reality-in-itself does not mingle with Unreality” in the first place, whether by necessity or by chance (i.e., unlike arbitrary phenomenological entities mingling across time and space), for otherwise (noumenal and phenomenal) “things”, even the Universe itself, would cease to exist “as one and at once” (at one “Now”) — and both Reality and Unreality too would be Not —, which is absurd in a four-fold manner: before, during, after, and without time. 2. It contains “things” and yet these “things” contain it not, not merely in the spatio-temporal sense but in the sense that Reality, as Moment, always precedes and surpasses “things” behind, within, and ahead of them, and “none of these at all”. 3. The “distance”, i.e., meta-logical foliage, between the four ontological categories is thus asymmetric and anholonomic: phenomenally approaching Reality (M) from the transitive entirety of phenomena (O) will be substantially different from approaching such phenomenal entirety (O) directly from Reality (M). In other words: $\{OM\} \neq \{MO\}$. 4. There exists a meta-logical exception in that there are surjective instances with respect to which Reality is their exception just as they are Reality’s exceptions (singularities) everywhere in the Universe, i.e., they, unlike others, exist in sheer eidetic-noumenal symmetry with Reality and the Universe. Such an instance is none other than Genius. 5. In the surjective-deterministic sense of Reality, there exists an ultimate observer in the twice-qualified ontological sense of Genius, as opposed to an arbitrary observer: whether or not a leaf falls in a forest with apparently no observer around, it still falls simply because the Universe, in its capacity as an ultimate observer, observes it. This is because the universal meta-structure is such that the Universe is without both “inside” and “outside” with respect to the (noumenal) entirety of the laws of Nature. This saves both common-sense objectivity while, up to such non-arbitrary ontological qualification, keeping intact the unification of observers and obser-

vables as found in both quantum mechanics and the monad formalism of General Relativity (e.g., of Abraham Zelmanov). Otherwise, without such universal determination, one is left with mere surrealism and omnijectivity, which, as we have said, can in no way be a direct presentation of Reality-in-itself.

All that, in a word, is symbolically-noumenally written in a single “Reality equation” as follows:

$$M: N(U(g, dg)) \sim S$$

where M stands for Reality (Reality-in-itself, “Being-qua-Being”), N for the Qualic Monad (Reality’s entirely pre-reflexive, self-singular presentation of itself, i.e., with or without the Universe and reflective world-foliages, or “Multiverse”), U for the noumenal Universe (the Universe-in-itself), (g, dg) for Surjectivity and infinite self-differentiation (isomorphic to Genius — which is none other than surjective, archetypal insight and motion — and the “interior” of the Universe), and S for Suchness (Eidos).

Thus, by “Universe” — in this truly qualified sense of Reality — we always mean “Such Universe”, where “Such” is “Twice-That/There” (in terms of the phenomenal “without” and the noumenal “without-the-without”) and “Universe” is “Twice-This/Here” (in terms of the phenomenal “within” and the noumenal “within-the-within”).

In this epistemology, the Universe — in the likeness of Reality itself — is therefore most tangible and most elusive at once: it is “that which draws near from farness and draws far from nearness”. It takes Genius to truly comprehend this as it is, for the relationship between the Universe and Genius in this respect is like that between the entire cosmos and the monopolar meta-particle.

Such is how our framework generalizes Kantianism (and what not) by the presence of the self-singular monad (“surject” or “qualon”, i.e., the ultimate pre-reflexive singularity) free of the inconsistent inner state of “singularity in and of multiplicity” when it comes to phenomenologically defining traditional “Kantian oneness” (due to which Kantianism ultimately fails to distinguish between — or simply transcend — “a thing-in-itself” and “another thing-in-itself”, let alone between all noumena). In addition, it also effortlessly surpasses the analytical rigor of Wittgensteinian logic and eradicates all discrepancies between “essentialism” and “existentialism” on a highest possible ontological level.

As such, Genius belongs to a self-singular nature (self-constitution) of not just psychological thought, but also of Reality itself, independently of the entire contingency (and, often, over-determination) of tautologically constructed world-representations by the majority of sentient beings. Such strictly individual determination, of Genius, is thus called “surjective”. This, while talent is always info-cognitively co-dependent on the entirety of prevailing contingencies, i.e., on the way a specific world is represented by them as “multiple intelligences” (through theses and anti-theses).

In other words, with respect to the Universe, Genius is Reality's very exception just as Reality is the very exception of Genius. Just as Reality is One-Singular beyond reducibility and reflexivity (mere reflection and projection), so is Genius, and so is the "mirror", i.e., the mirror in which the surjective instance of Genius appears: the Universe itself. As such, unlike the case of talent, there is indeed no such a thing as "mathematical genius", "physical genius", "philosophical genius", "musical genius", etc. as people are commonly, partially, phenomenally used to these terms. Rather, Genius is always universal and, by that very universality, it is solitary and chanceless: such is the nature of universal creation known as art, which is the quintessence (*sine qua non*) of genuine philosophical, artistic, and scientific creation.

In physics especially, the universal weight of an instance of scientific creation by an individual of Genius inevitably differs from the rest of physicists simply because the former moves — without residue and mere chance — as an epistemically solitary artist at the very universal level of "science-in-itself", and thus at the Universal Moment, by whose act the artist is immensely self-rewarded without even seeking recognition other than the necessity to move as the Universe categorically moves from the noumenal category to the phenomenal domain, while at best the latter is merely tautologically interested in "the problems that are important according to others" — ever at the risk of genuine originality (although, as we have seen, Genius is not a matter of merely being situational, but of the pan-Kierkegaardian infinite single-mindedness of "I cannot do otherwise", in contrast to talent).

Hence, silently in the face of Reality, Genius happens to the Universe as much as the Universe happens to it, while others can hardly notice, let alone imbibe, this epistemological degree of universal solitariness.

That is, to paraphrase Einstein somehow,

"True science, if not art itself, consists in the following: apply yourself entirely and fearlessly to what deeply interests you the most, and not simply to what others — no matter who — are interested in, as this is between you and the Universe, not you and people. This is because every true philosopher (or profound thinker and creator), who truly understands his own moments, has his own Kant".

Of course, depending on the epistemological dimensionality of a given human endeavor or science, there are instances where "working as a group" is important and essential to progress (e.g., medicine, experimental psychology, and engineering). But in fundamental abstract sciences, as fundamental as they are in relation to art and philosophy, there should be no excuse as to the arbitrary, non-epistemological "peer-group treatment" and "machination" to which true individual geniuses are often subject, precisely because such individuals alone carry the very archetype of Universality and Revolution, which is absolutely not a matter of societal trait-

ning and progress. Intrinsically, such an individual may indeed refuse the entirety of conventions of a particular society of people and their agendas in order to infinitely eye the noumenal-creative "science-in-itself", instead of just participating in "big scientism" and its often excessive relative loudness.

For instance, aside from the creation of fundamental theories or mathematical methods, the eminent general relativist who spear-headed the Soviet cosmological school, Abraham Zelmanov, is said to have regarded writing mere academic articles as a "waste of time" [5]. Also Einstein himself is known to have principally disregarded the anonymous "peer-review" system prevalent in the American system, as opposed to the way things were done rather transparently, epistemologically, and dialectically in Europe at the time his theories flourished: so long as there are no mathematical and other fundamental flaws in a submitted scientific thesis containing some genuine novelty, a corresponding anti-thesis would simply be presented by the scientific editor(s), and thereafter a common synthesis should likely be reached by both the individual scientist and the universally capable editor(s): such is the epistemologically universal way of disseminating novel scientific ideas and progress, and of championing true academic freedom, as greatly opposed to all superficial excuses (especially those made by fallible, anonymous observers). It was also Einstein's single-mindedness which made him unable to accept "quantum theory as Copenhagen sees it", strongly believing in a more deterministic (geometric) fashion thereof — a "fate" he shared with even de Broglie (who envisioned a kind of hidden "thermostat medium" in quantum physics) and Bohm (with his hidden-variable quantum theory), among others.

This, while mere "crackpots" are easily seen in broad daylight for themselves, and yet Genius is not even visible in the blazing sun of the day as in the mirrorless depths of the night — unless by way of sheer deliberation on the part of the individual of Genius himself. Indeed, of this — and after a lengthy, peripheral epistemic discourse and logical ascension — Wittgenstein himself would have said, "Up there, I am senseless: you must understand me senselessly". (See, e.g., [6]; during his entire solitary life, Wittgenstein only cared to produce two condensed philosophical works — each being a self-complete fundamental treatise written in a very unorthodox style — instead of writing mere philosophical "documentaries".)

However, the situation with "Genius and people" is rather helpless in any age due to the anholonomic, asymmetric nature of Genius — and the entire Universe itself — with respect to the rest of otherness, of which individuals of Genius are acutely conscious: just as the distance between Reality and "things" is not the same as that between "things" and Reality, as we have seen, the distance between Genius and people is not the same as that between people and Genius. Thus, mere sense-projection often only makes things worse.

To understand Genius, one must understand the noumenal Universe within its very own solitary instant, while most people, merely existing in groups and in definite contingency of both stances of the “dogmatist” (of objective dogmatism) and the “relativist” (of subjective relativism), are still far away from such cognizance, not just in the phenomenal-progressive sense, but in the entire ontological-noumenal sense. Still, one must know the noumenal even better than Kant himself understood it (and his entire epistemology), hence the phrase, “to understand Kant is to simply surpass him, there is no other way”. Needless to say, the same seems to hold for most known physical theories as well — such as relativity and quantum theory, — especially in terms of the truly epistemological-universal construction of quantum gravity and unified field theories.

Indeed, while some of the known geniuses of the past are rather belatedly celebrated by people today (only to superficially project themselves on the past and to aggrandize their own sense of historical continuity as such), they always tend to neglect the geniuses of the present. This is precisely because they themselves, no matter how talented and bright, are not geniuses and have no substantial resemblance with them whatsoever: they are merely the product of the age. It is in this rather secluded Schopenhauerian-Weiningerian sense and infinite, silent understanding that Genius, more than others, embraces tragedy willingly: he is absolutely not the product of the age in the first place and he suffers most intuitively amidst people.

Hence, in any cosmic epoch, the so-called “Renaissance” is that infinitely solitary period of Genius before everyone else is capable of naming it, and not merely its subsequent, timely crumbs as received by a particular culture (society). It is the “mysterious” (as Einstein would have called it), not “public space”.

A man of Genius is simply a universal volunteer on the canvas of Reality, without ulterior motives whatsoever, and without him, Reality would never “archetypally act upon itself” in and of the Universe: as such, he is most capable of infinite differentiation (“noema” and creation) peculiar to his singular Genus alone. Such Genus (“Kudos”) is transcendent — not simply parallel or anti-parallel — with respect to all species.

As long as the four-fold logic behind Reality, the Universe, the manifold world-imagery, and Genius is not realized, an “objective dogmatist” will always fall into a “subjective relativist” (and mere sophist) soon enough, and vice versa, for the horizon-forming duality of phenomenological things remains as such, according to traditional “two-dimensional” (or “two-and-a-half” at most) erudite logic. Such, then, only serves to yield a fallible observer, of whom Genius has no need whatsoever. In this sense, art is indeed most suitable to most geniuses than is academic science, precisely due to the more solitary noumenal-epistemological nature (richness) of art and its practicality at large. But, whe-

never such a universal mind appears in scientific territories, one must intimate the art of it all, without any “sophisticated pretention” whatsoever, rather than simply dismiss the emergent qualic unorthodoxy peculiar to Genius (for, as history has shown, such only results in one’s shameful chagrin in the face of Reality, whether immediately or eventually), of which that one has no true understanding whether in short or at length. (In this respect, one can simply imagine Kant and Goethe — rather than Euler and Gauss — doing some particular sciences, apart from philosophy and art, and the predictable neglect and cold calculation of those who feel their territories have been violated. Fortunately, this particular case involving the two men and the rest of the world does not seem to have taken place.)

Undoubtedly, the foregoing epistemological discourse fully capable of mirroring “worlds”, “anti-worlds”, and “non-worlds”, (by “world”, of course we also mean “thought” or “paradigm”) from the universal standpoint of Reality itself, is particularly relevant to the championing of scientific human rights as outlined in [2] as well as to the importance of aprioristic and dialectical thinking in physics (and science in general) as reflected, e.g., in [3] and [4].

All that — the Universe itself — is inevitably opposed to mere communalism, especially in the post-modern era of “big scientism”.

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