## Speculation on the Quantum Mechanism of Death

## by strannikov

An alien character in one of my fictions (no native of the Earth we all love and have been taught to despise) rudely commented thus: "Anyone idiot enough to be born on a planet deserves to die on a planet!"

I'm still unsure what his point was, since mortality likely is a universal phenomenon not restricted to inhabitants, bipedal or otherwise, residing on any planetary body through galaxy or universe.

Nevertheless, die we must, and die we shall.

Meanwhile: what might our newish physics be telling us about the mechanism of death?

For one thing "quanta" are not merely sub-atomic particles used for conducting experiments with particle collisions in hadron colliders large or small: the quanta in question are in part constituent of and to our mortal frames.

One property of quanta, shared with all baryonic matter, is that they cannot sit still. Quanta fluctuate or oscillate, unless or until overcome by some other force of nature, a force as dispersed but as ubiquitous and as localized as, say, gravity (trained physicists might prefer to invoke some other force).

Death, we might surmise, on any planet like our own, can be construed as the result of gravity bringing the inner quantum oscillations of our somatic being to a (relative) standstill. Because the heart is the organ that registers the somatic rhythms of our physical conception all life long, it is at least possible that the quantum oscillations that gravity stills are those in the molecules and atoms of our cardiac physiology: lifelong exposure to Earth's

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gravity brings quantum oscillations to a halt (gradually reduces the arc of the pendulum's swing, to employ another metaphor) on the particle level of our constitution, so that soon enough the rhythm of life on the molecular and cellular and tissue levels of the heart's construction comes to a halt. (Do not expect me, gentle reader, to complicate this argument by adducing other somatic pathologies which are always ready to befall us.)

Once the somatic inertia of death (localized for us on the planet we sprang to life from) has overcome us, what might occur next? No physicist I, but since professional physicists and cheerleaders for Holy Science permit themselves so much in the way of untethered supposition, wild imagination, and ungrounded surmise, I offer this: our consciousness is washed and rinsed and drained away from our baryonic, somatic state directly into the directly adjacent realm of dark matter, which by current reckoning must constitute over twenty-five percent of all the mass and energy in the known universe, compared to our native baryonic realm's paltry five percent.

Before leaving the baryonic realm behind in our speculation, though, we might consider that, to whatever extent Earth's gravity exerts a stabilizing force upon local quanta over time, Earth itself is ceaselessly moving—yearly around its Sun, always trailing behind the Sun as our star spins around the disc of the Milky Way galaxy once every two hundred-thirty million years or so, during which aeons the Milky Way itself is spinning, whirling, and flying through space for untold numbers of light-years (if you want to do the math, begin with the approximate velocity of the Milky Way through the space occupied otherwise by the Laniakea Supercluster [some 300 km/s], convert to miles per second, then calculate an annual estimate of distance traveled in miles, then multiply by 230 million).

Just as Heraclitus of Ephesus observed c. 500 BCE that "no one steps into the same river twice", so from moment to moment throughout its billions of years of baryonic existence, Earth has never occupied the same exact space twice. Earth leaves no visible

trail in its wake, but we need not necessarily assume that the planet leaves no cosmic imprint behind where it has passed: after all, Heraclitus went on to assert that "a non-apparent connection is stronger than an apparent one".

So what cosmic phenomenon present and operating in the baryonic portion of the known universe could possibly be imprinting a quasi-eternal trail of Earth spinning and spiraling through quasi-eternal space? We have no need here to conjure any hypothetical agent since contemporary physics already has a name for what could easily be a likely candidate: neutrinos.

Neutrinos by current reckoning have an intimate connection with non-baryonic portions of the known universe, viz., the realm of dark matter (if not also the even more enormous realm of dark energy, said to be driving the increasing velocity of the continuing expansion of the entire universe). Neutrinos carry no electrical charge of their own (as do their cousins, the electrons) and have either next to no mass themselves or no mass whatsoever, features or characteristics that entail that they do not interact with baryonic matter with any frequency or regularity or to much known effect, since it is today commonly said that some one hundred trillion neutrinos pass through your somatic frame each and every second of your baryonic existence.

Since I am no particle physicist, I will not attempt here to account for the properties of neutrinos beyond what a good encyclopaedia entry might impart: but one feature of neutrinos is reported to be their oscillatory character, the fact that they exhibit "spin" (whether in the form of a standard neutrino or in the form of an anti-particle anti-neutrino). One other notable feature of neutrinos is that they exhibit "chirality", a property which manifests itself on the particle level just as it manifests itself on much larger macro scales (observable when we look at our two hands side by side). These features of neutrinos, which again interact weakly—very weakly—with baryonic matter could well make of neutrinos the (quasi-)physical medium that conveys mortal being through the experience of death, washing and rinsing our

consciousness in its somatic, baryonic constitution out of our bodily frames and directly into the directly adjacent realm of dark matter. If in fact gravity nullifies quantum oscillations at the particle level within the atoms and molecules of somatic tissues and organs, it could well be the case that neutrinos with their inherent oscillatory properties "revivify" or merely "transit" us from an inert mortal state in the baryonic realm to whatever state might await us in the realm of dark matter (which, again, while not itself baryonic matter, is itself constituent to the baryonic universe we presently reside in).

I do not propose or suggest that "the realm of dark matter" is to be taken as the quasi-material domain or habitation of what mortals have long conjectured to be "heaven", far from it: with all the foregoing as preamble, it is enough only to surmise here that the realm of dark matter might be some kind of way station on a much longer journey that "distills" us as we pass through other realms of existence whose character we might anticipate with longing or fear with dread.

Not to make too much of it, but the terrestrial legacy of human intuition of or experience with "spirits" and "spirituality"—human experience with some partially palpable realm that has afforded brief and fleeting glimpses to at least some of our kind over the millennia—could begin to find its explication in realms of physics that might themselves be coming "full circle" back to the legitimate consideration that gross or rude materialism does not and cannot account for the spiritual realities and/or extra-physical intuitions of our baryonic existence. If the law of the conservation of energy holds a candle, it seems entirely likely (to this non-physicist) that the physical energy inherent to our somatic frames does not fail to go somewhere at death: so I conclude with the further surmise that, if our somatic energy levels migrate "outwards" from the baryonic realm at our deaths, the physical energy of our beings somehow winds up in the much larger realm of dark energy (the force said to be driving the expansion of the universe)—in which case: death itself is a contributing force helping to drive the increasing velocity of the expansion of the known universe.

With whatever else physicists may learn in this age of physics, perhaps possibly maybe they will begin to see that the connections between the physical world and non-physical domains of existence have an explanatory power which has only barely been considered.

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