

Larry's Lack of Qualia

Donald Mender*

The trilogy 'Consciousness in the Universe is Tuned by a Musical Master Code' by Meijer et al, published in *Quantum Biosystems*, vol 11, no. 1, 2020 is reviewed.

Key Words: Consciousness, musical isomorphisms, Hard Problem, qualia, gedankenexperiment, metaphysics, Cosmo-Larry.

Quantum Biosystems. 11 (2) 1-2

* Yale University, USA. e-mail: donald.mender@yale.edu

The wide ranging and deeply probing exploration of physical reality by Dirk Meijer, Igor Jerman, Alexey Meklikh, and Valerly Sbitnev in their three target papers (Meijer et al 2020a,b,c) attempts to identify a nexus of quantum-theoretical, nonlinearly dynamical, geometrical, and informational features displaying musical isomorphisms ostensibly germane to both life and consciousness at multiple levels, including Planck, cosmological, and intervening scales.

I accept, leaving aside any considerations about consciousness, that this effort by the authors may provide a valuable synthesis pointing toward heretofore hidden links between fundamental non-classical physics and the processes of life. The authors may also have succeeded in highlighting and clarifying previously neglected quantum-biophysical correlates of sentience and hence may have advanced solutions to subtle albeit, in Chalmers' parlance, "easy" problems regarding consciousness.

However, it seems to me that the target papers have opened up no new substantive path toward solving the Hard Problem (Chalmers 1995, 1996). The authors have left qualia not merely unexplained but in essence conceptually unmobilized. Qualia may be plausibly interpreted as introspective psychological observables, such as a pungent odor or an itch, in line with both the classical 19th century psychophysics of Weber and Fechner and the quantum-probabilistic 21st century psychology of Pothos and Busemeyer (2013).

The target papers cast no specific qualia as explicit observables. The authors invoke only standard physical observables (energy, time, etc.), geometrical and other mathematical formalisms, notions of "self-reference" harking back to positive and negative feedback mechanisms, and quantitative information, itself possessing no intrinsic qualitative character.

I'd like to adapt Frank Jackson's famous gedankenexperiment (1982), with a few embellishments, in order to drive home my concerns in relation to the authors' de facto neglect of qualia. Jackson's fictional "Mary" is a scientist who has acquired a theoretical acquaintance with all existing physical, neurobiological, and other objective knowledge about the nature and perception of color.

Yet she has dwelled her entire life within a totally black-and-white domicile; she has never actually seen a color. One day, Mary steps out from her home into a riotously colorful world and for the first time subjectively experiences the redness of a tomato.

Now, one may argue that such a postulated scenario is fraught with flawed ontogenic assumptions, but the logical principle illustrated by "Mary" stems from a seminal point originally made by Leibniz: a subjective conscious experience is not the same as its ostensibly underlying "mechanism."

Something more, a quale, must be added to the items under consideration in order to capture the richness of the relevant metaphysics.

If instead of Mary we consider Larry, a fictional acoustical scientist, then my reservations about the target papers should become clear.

Let us imagine that Larry has lived his entire life wearing 100% noise-canceling ear buds within a sound-proof home devoid of musical instruments, loudspeakers, and similar devices.

One day he leaves his house, finds himself in the midst of an open air concert, removes his ear buds, and for the first time subjectively experiences – well, real music!

We might ratchet up the scale of the above thought experiment by considering Cosmo-Larry, The Big Audience comprised by the whole universe, newly contemplating the tinkling of Its Own Intergalactic Borborygmi and associated harmonic resonances. Yet if the a priori synthetic tools with which Cosmo-Larry has been equipped from the outset include merely physical observables, formal structures, and a vague generic question-begging notion of “cosmic consciousness” lacking specific (e. g. auditory) qualia-observables, then any basis for a cosmological transition from mechanical vibration to music appreciation must remain obscure.

I would urge the authors to consider the possible virtues of adding qualia-observables to their physical deliberations.

In a quantum context, such an enrichment would mean adopting qualia-operators upon psychological wavefunctions.

However, one must be on guard against that expanded set of operators generating potential complications by violating the causal completeness of physics.

In recognition of such a peril, a productive response might aim at demoting physics as a whole to the status of a merely effective theory, subsumed by but epistemically shielded from a larger psychophysical discipline (Mender 2020).

References

- Chalmers, D. (1995) Facing up to the problem of consciousness. *Journal of Consciousness Studies*, 2:3, 200-219.
- Chalmers, D. (1996) *The Conscious Mind: In Search of a Fundamental Theory*. Oxford: Oxford University Press.
- Jackson, F. (1982) Epiphenomenal Qualia. *Philosophical Quarterly*, 32:, 127–136.
- Meijer, D., I. Jerman, A. Melkikh and V. Shbitnev (2020a) Consciousness in the universe is tuned by a musical master code. part one: a conformal mental attribute of reality. *Quantum Biosystems* 11:1, 1-31.
- Meijer, D., I. Jerman, A. Melkikh and V. Shbitnev (2020b) Consciousness in the universe is tuned by a musical master code. part two: the hard problem in consciousness studies revisited. *Quantum Biosystems* 11:1, 32-71.
- Meijer, D., I. Jerman, A. Melkikh and V. Shbitnev (2020c) Consciousness in the universe is tuned by a musical master code. part three: a hydrodynamic superfluid quantum space guides a conformal mental attribute of reality. *Quantum Biosystems* 11:1, 72-107.
- Mender, D. (2020) Q-deformed physics and effective psychophysics. Conference Website, *Toward a Science of Consciousness 2020*, Concurrent Session C14.
- Pothos, E. and J. Busemeyer (2013) Can quantum probability provide a new direction for cognitive neuroscience? *Behavioral and Brain Sciences*, 36:3, 255-274.