

Poe's Vision of Atonement: The Anthropic Principle in Eureka

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Abstract

I will focus on the imaginative contribution that Edgar Allen Poe brought to scientific debates regarding the fate of our universe. At the basis of many a nightmarish vision of apocalyptic destruction, there lies the unwillingness of the human mind to make allowance for divine intervention or to make an imaginative appeal to the soothing power of such a morally superior instance. For all his avantgardistic vision, Poe insists upon and constructs his cosmological model around the principle of a Divine Essence, which initially created the universe and which is omnipresent, being embodied and living through all God's creatures. As the instrument to detect this force, Poe proposes intuition and, empowered by it, he is able to state "calmly" an "absolute truth" – confirmed by present-day cosmology – namely that our universe is evolving, its existence a mere cycle in the beating of the Divine Heart. The cornerstone of Poe's visionary cosmology consists of what is known as "the anthropic principle", which will be used in the present paper as a possible key to achieving a dialogic interface between Science and Religion at a time when such an opportunity constitutes a rather stringent necessity.

Motto: "Nevertheless it is only as a poem that I wish this work to be judged after I am dead." (Poe 1848)

If visions of science fiction strive to contain, but equally exploit, our subconscious fears and desires regarding technological domination of the human race, a perspective such as that offered by Edgar Allen Poe's *Eureka* (1848) comes to soothe our troubled consciousness. After elaborating on the astronomical intricacy of the universe with much theoretical gusto, Poe pronounces several axioms that are poetical in their beauty and divine by their aloofness, while confirming his anticipatory genius. We should not forget, also, that some of his literary creations pertain to the science-fiction genre, whose invention may safely be attributed to him. Yet, where the traditional S.F. works promote an anti-humanistic vision frequently involving technological breakdown and apocalyptic nightmares, Poe's philosophy is based on the Aristotelian principle of deduction, whose premises are the self-evident, enduring truths of humanity. Axioms, coupled with intuition, are the bases of Poe'sⁱ theories, which were deemed quasi-scientific for almost a century before the findings of contemporary physics demonstrated their validity.

In this insightful work, Edgar Poe envisaged a universe in which matter is finite but cosmic space is infinite, the galaxies and planets being formed in the period of collapse of the universe to its initial condition of unity by the action of small fluctuations in the density of matter. According to A. Cappi, this represents a scientifically plausible Newtonian model in which the universe is represented as perpetually evolving. Since Poe subscribed his theory of the universe to the "eureka" effect, it is clear that he allows intuition and imagination to work their magic so as to uncover the making and predict the un-making of our world. Ironically, the poet introduces in the beginning of his study a story about a manuscript from the year 2848, which recounts the history of human thought and the various contributions brought by philosophers and scientists within a millennial loop. As M. Stroe reveals, Poe uses this pretext to attack the type of reasonable, analytical thinking typical of Bacon or Descartes's scientific materialism. To these, he counterpoises the soaring of the free spirit whose progress short-circuits historical eras and occurs by intuitive leaps (exemplified by the snail thinking mode versus the soaring eagle's vision).

The scientific model he proposes is based on symmetry and consonance and revolves around the anthropic principle – which is also a Romanic notion: that of the mirroring of the whole in its parts, resulting in a vision of the universe as a hierarchy of atoms, ranging from the microscopic particles composing our world and ourselves and up to the macrocosm that is conceived as the giant, pulsating heart of God (whose heartbeat is the same as ours - sic!). The anthropic principle also states that the universe has reached a certain age that is topical for the possibility of its being observed, analysed and understood by the human mind. Thus, Poe's cosmic vision can be attributed to God's will, which is perceived as benevolent albeit indomitable. The symmetrical beauty of Poe's system has an axiomatic clarity and a logical edge to it that made critics such as John T. Irwine suppose that the work was laid out as a scientific-detective plot of the Auguste Dupin type. Therefore the solution to the universal enigma must be both mathematically accurate and aesthetically satisfactory, while the mystery of its solving will be forever buried in the genius's mind: "in the intellectual firmament [...] lies a nebula never to be solved", the poet warns us. As Stroe points out, Poe is thus a precursor of the modern theory of the archetypal fields, with the archetypes being like the knots of maximum psychic energy around which the fields of psychic force unfold similar to stellar nebulae. It is this very nebular structure in the psyche that makes possible the practically infinite complex of degrees of freedom of thought and emotion (2010, p. 87).

Moreover, the model selected by Poe to define the spatial universe is indebted to Pascal's mysticism: "a sphere of which the centre is everywhere, the circumference nowhere", a romantic concept that reconfirms the anthropic principle, entrusting upon the human spirit a titanic essence. Poe's paradoxical notion of "finite infinity" refers to the original unity – the absolute Particle of Matter or the "Titanic Atom"ⁱⁱ – which dispersed itself into a multitude of atoms at the beginning of time, only to regroup itself when history ends. Similarly, human consciousness which is so self-centred will eventually become increasingly aware of its being a part of the universal consciousness and finally be merged with the Divine Spirit:

"Think that the sense of individual identity will be gradually merged in the general consciousness – that Man, for example, ceasing imperceptibly to feel himself man, will at length attain that awfully triumphant epoch when he shall recognize his existence as that of Jehovah. In the meantime, bear in mind that all is Life – Life – Life within Life – the less within the greater, and all within the Spirit Divine" (2005, p. 210).

Despite such mystical and lyrical insertions, certain theorists assert that Poe's model of the universe, with its Newtonian logic, was scientifically proven only in 1934 by Edward Arthur Milne and William Hunter McCrea (cf. Popa, p. 11). It has been equally demonstrated that this

work contains plausible anticipations of the most crucial findings in recent astrophysics, the upholders of which have been frequently awarded the Nobel prize for their demonstrations. Such theories include: the Big Bang (radiation of particles from a common source); black holes; Hubble's law of the expanding universe; chaos theory (intimations of fractals and the butterfly effect – cf. Stroe 90); the possibility of multiple universes (which leads to confusion with and accusations of polytheism – cf. Stroe, p. 91); the existence of worm holes; the intuition of matter as energy (anticipating Einstein's E=mc2); the background radiation of the universe (the idea that the past is with us, energetically speaking); the notion of the space time-continuum propounded by Hermann Minkowski and Albert Einstein; and the Big Crunch hypothesis (the final catastrophe, i.e. the "common embrace" into "one material *globe of globes*"). Also worth mentioning is Poe's ultimate (and not yet confirmed) scientific intuition – what he calls the law of periodicity (or the "Pendulum of the Cosmos", cf. Stroe). This is translated poetically as none other than the "throbbing of the heart divine" or the perpetual alternation of creation and destruction of the universe.

After such an impressive enumeration, one has to return to Poe's romantic "modesty" –which carries a high degree of irony with it. It is "only as a poem" that he wants his work to be read and remembered. But, according to the poet, art equals truth. However, I believe that this amazing self-assurance was not vainly egotistic and that the "solidity" of his theories was based on faith. As final proof, I would like to present the feeling of "at-home-ness" in his lingering vision, totally opposed to the science-fictional "lost in space" feeling, where technology frequently becomes incontrollable and destructive. After metaphorically describing the universe as "a cluster of clusters", Poe states that our galaxy is our HOME, where not only human beings but equally the sun and the earth are "at home"...There is no hint of alienation here, but only calm comprehension. Therefore, *Eureka* indirectly proves that science and religion may happily coexist, since both are expressions of the liberated human soul, whose finite powers pay eternal tribute to the flight of imagination exerting itself infinitely across space and time.

Works Cited:

Cappi, A., 1994. "Edgar Allen Poe's Physical Cosmology." QJR astr. Soc. 35, pp.177-192.

Poe, E. A., (1848). Eureka. Bucharest: Ed. Didactică și Pedagogică (Trans. Maria Donose, 2005).

Popa R., 2005. Introduction to *Eureka* (Edgar Allen Poe, Ed. Didactică și Pedagogică, Bucharest), pp. 7-17.

Stroe, M., 2010. "The Titanic Atom: Edgar Allen Poe's Romantic Cosmology in Eureka." In:

University of Bucharest Review, vol. 12, no. 2, pp. 81-97.

http://en.wikipedia.org/wiki/Anthropic_principle

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ⁱ Poe's work was initially contested, although many physicists and mathematicians had resorted to intuition along the centuries – its scientific utility being finally acknowledged in the 20th century by Jules Henri Poincaré.

ⁱⁱ Mihai Stroe's term, which however denotes indivisibility – which is not what Poe intended; his original "Particle" is infinitely divisible but at the same time unique in its Oneness.