

= Eureka : A Prose Poem =

Eureka ( 1848 ) is a lengthy non @-@ fiction work by American author Edgar Allan Poe ( 1809 ? 1849 ) which he subtitled " A Prose Poem " , though it has also been subtitled as " An Essay on the Material and Spiritual Universe " . Adapted from a lecture he had presented , Eureka describes Poe 's intuitive conception of the nature of the universe with no antecedent scientific work done to reach his conclusions . He also discusses man 's relationship with God , whom he compares to an author . It is dedicated to the German naturalist and explorer Alexander von Humboldt ( 1769 ? 1859 ) . Though it is generally considered a literary work , some of Poe 's ideas anticipate 20th century scientific discoveries and theories . Indeed a critical analysis of the scientific content of Eureka reveals a non @-@ causal correspondence with modern cosmology due to the assumption of an evolving Universe , but excludes the anachronistic anticipation of relativistic concepts such as black holes .

Eureka was received poorly in Poe 's day and generally described as absurd , even by friends . Modern critics continue to debate the significance of Eureka and some doubt its seriousness , in part because of Poe 's many incorrect assumptions and his comedic descriptions of well @-@ known historical minds . It is presented as a poem , and many compare it with his fiction work , especially science fiction stories such as " The Facts in the Case of M. Valdemar " . His attempts at discovering the truth also follow his own tradition of " ratiocination " , a term used in his detective fiction tales . Poe 's suggestion that the soul continues to thrive even after death also parallels with works in which characters reappear from beyond the grave such as " Ligeia " . The essay is oddly transcendental , considering Poe 's disdain for that movement . He considered it his greatest work and claimed it was more important than the discovery of gravity .

= = Overview = =

Eureka is Poe 's last major work and his longest non @-@ fiction work at nearly 40 @, @ 000 words in length . The work has its origins in a lecture Poe presented on February 3 , 1848 , titled " On The Cosmography of the Universe " at the Society Library in New York . He had expected an audience of hundreds ; only 60 attended and were confused by the topic . Poe had hoped the profits from the lecture would cover expenses for the production of his new journal The Stylus .

Eureka is Poe 's attempt at explaining the universe , using his general proposition " Because Nothing was , therefore All Things are " . In it , Poe discusses man 's relationship to God and the universe or , as he offers at the beginning : " I design to speak of the Physical , Metaphysical and Mathematical ? of the Material and Spiritual Universe : of its Essence , its Origin , its Creation , its Present Condition and its Destiny " . In keeping with this design , Poe concludes " that space and duration are one " and that matter and spirit are made of the same essence . Poe suggests that people have a natural tendency to believe in themselves as infinite with nothing greater than their soul ? such thoughts stem from man 's residual feelings from when each shared an original identity with God . Ultimately individual consciousnesses will collapse back into a similar single mass , a " final ingathering " where the " myriads of individual Intelligences become blended " . Likewise , Poe saw the universe itself as infinitely expanding and collapsing like a divine heartbeat which constantly rejuvenates itself , also implying a sort of deathlessness . In fact , because the soul is a part of this constant throbbing , after dying , all people , in essence , become God .

= = Analysis = =

Eureka presents themes and sentiments similar to some of those in Poe 's fiction work , including attempts at breaking beyond the obstacle of death and specifically characters who return from death in stories like " The Fall of the House of Usher " and " Ligeia " . Similar to his theories on a good short story , Poe believes the universe is a self @-@ contained , closed system . In coming to his conclusions , Poe uses ratiocination as a literary device , through his character C. Auguste Dupin , as if Poe himself were a detective solving the mystery of the universe . Eureka , then , is the

culmination of Poe 's interest in capturing truth through language , an extension of his interest in cryptography .

Eureka seems to continue the science fiction traditions he used in works like " MS. Found in a Bottle " and " The Facts in the Case of M. Valdemar " . He further emphasizes the connection between his theory and fiction by saying that the universe itself is a written work : " The Universe is a plot of God " , Poe says , and " the plots of God are perfect " . Even so , Poe admits the difficulty in explaining these theories comes in part from the limitations of language , often apologizing for or explaining his use of " common " or " vulgar " terms .

Poe 's decision to refer to the piece as a " prose poem " goes against some of his own " rules " of poetry which he laid out in " The Philosophy of Composition " and " The Poetic Principle " . In particular , Poe called the ideal poem short , at most 100 lines , and utilizing the " most poetical topic in the world " : the death of a beautiful woman . Poe himself suggested that the work be judged only as a work of art , not of science , possibly dismissing the seriousness of Eureka . Though he is using mathematical and scientific terms , he may really be talking about aesthetics and suggesting there is a close connection between science and art . This is an ironic sentiment when compared to his message in the poem " To Science " where he shows a distaste for modern science encroaching on spirituality and the artist 's imagination . Poe also discusses several astronomy @-@ related topics in Eureka , including the speed of the stars , the diameters of planets and distance between them , the weight of Earth , and the orbit of the newly discovered " Leverrier 's planet " ( later named Neptune ) .

The work ventures into transcendentalism , relying strongly on intuition , a movement and practice he had despised . Though he criticized the transcendental movement for what he referred to as incoherent mysticism , Eureka is more mystical than most transcendental works . Eureka has also been compared to the theories of Mary Baker Eddy , founder of Christian Science and Joseph Smith , founder of the Latter Day Saint movement .

The essay is written in a progressive manner that anticipates its audience . For example , Poe uses more metaphors further into the work in the belief that the reader becomes more interested . Poe 's voice crescendos throughout , starting as the modest seeker of truth , moving on to the satirist of logic , and finally ending as the master scholar .

= = = Allusions = = =

" Eureka " - The title itself references the famed remark made by Archimedes , meaning , " I have found it . " Archimedes used the term after taking a bath and discovering the concept of displacement .

Epicurus - Poe refers to the Ancient Greek philosopher with the term " Epicurean atoms " . Epicurus believed that reality is composed solely of atoms , or indivisible units of mass , and void . It has been suggested that Poe 's exultation of the " false scientist " Epicurus is an indication that Eureka is really a satire .

Aristotle - Poe refers to the famous student of Plato as " Aries Tottle " , whom he claims is Turkish and whose ideas come out of his nose like sneezes .

Francis Bacon - The name " Hog " is a reference to the English philosopher and originator of the Baconian method .

Euclid - Referred to as " Tuclid " , a student of Aries Tottle .

Immanuel Kant - Poe describes Kant as the " Dutchman " who originated transcendentalism .

The comical presentation of these well @-@ known historical theorists , including the puns on their names , suggests Poe intended Eureka to be a burlesque . Alternatively , his criticism of these men indicate Poe 's need to challenge their conclusions before making his own .

= = Influence and significance = =

Eureka has been read in many ways , in part because Poe 's sincerity in the work is questionable . It has been considered prophetically scientific , intuitively romantic , and even calculatingly ironic .

Lacking scientific proof , Poe said it was not his goal to prove what he says to be true , but to convince through suggestion .

Though modern critics have dismissed Eureka for having no scientific worth or merit , Poe 's work presages modern science with his own concept of the Big Bang . He postulated that the universe began from a single originating particle or singularity , willed by a " Divine Volition " . This " primordial particle " , initiated by God , divides into all the particles of the universe . These particles seek one another because of their originating unity ( gravity ) resulting in the end of the universe as a single particle . Poe also expresses a cosmological theory that anticipated black holes and the Big Crunch theory as well as the first plausible solution to Olbers ' paradox ( the night sky is dark despite the vast number of stars in the universe ) . In 1987 astronomer Edward Robert Harrison published a book , Darkness at Night , on this paradox . This book clarified why lack of energy explains the paradox , and lays out how Harrison discovered that Poe 's Eureka anticipated this conclusion .

Many of Poe 's conclusions , however , are speculative due to his rejection of analytic logic and emphasis on intuition and inspiration . Further , Eureka contains many scientific errors . In particular , Poe 's suggestions opposed Newtonian principles regarding the density and rotation of planets . He also says that Johannes Kepler came to his conclusions not through science but through guesswork . For this reason , it has been suggested that what Poe demands is true in Eureka is not actually about this universe , but a parallel fictitious one Poe creates . If this is the case , as interpreted by poet Richard Wilbur , Poe is criticizing this world , suggesting it has fallen away from God by elevating scientific reason above poetic intuition .

More modern critics also suggest Eureka is a sign of Poe 's declining mental health at the end of his life . Astrophysicist Arthur Stanley Eddington disputed this notion , declaring that " Eureka is not a work of dotage or disordered mind " . In the text , Poe wrote that he was aware he might be considered a madman . The lecture on which the essay was based was delivered only a few days after the anniversary of the death of his wife Virginia , suggesting a connection between the event and his new theories . Poe seems to dismiss death in Eureka , thereby ignoring his own anxiety over the problem of death .

Some modern critics believe Eureka is the key to deciphering meaning in all Poe 's fiction , that all his works involve similar theories .

= = Critical reception = =

Response to Eureka was overwhelmingly unfavorable . Poe 's friend Marie Louise Shew , who had helped his wife Virginia on her death @-@ bed , broke off their friendship because it offended her religious beliefs .

After the publication of Eureka , a vehement anonymous censure was published in the Literary Review . This was believed by Poe to have been written by John Henry Hopkins , Jr . ( 1820 ? 1889 ) , a young theological student , who had previously criticized the work as pantheistic and " a damnable heresy " that " conscience would compel him to denounce " . Literary critic George Edward Woodberry in 1885 thought the essay was based on a crude understanding of the science a student learns in school " rendered ridiculous " by absurdity and the density of his ignorance . Thomas Dunn English , a writer , lawyer , and doctor who frequently criticized Poe , wrote a news article for the John @-@ Donkey with the headline , " Great Literary Crash " . The article explained that a shelf of books crashed because someone had " imprudently " stacked an edition of Eureka on it and that it was a miracle that the whole building did not fall down because of it .

The lecture upon which Eureka was based also received negative reviews . Poe 's friend Evert A. Duyckinck wrote to his brother that the lecture bored him to death and that it was " full of a ludicrous dryness of scientific phrase ? a mountainous piece of absurdity . " A local newspaper called it " hyperbolic nonsense " . though one publication , the Courier and Enquirer , called it " a nobler effort than any other Mr. Poe has yet given the world " . Audience members said it was not persuasive or simply too long . Even so , Poe considered Eureka to be his masterpiece . He believed the work would immortalize him because it would be proven to be true . In the Preface , Poe said : " It is as a Poem only that I wish this work to be judged after I am dead . "

After its publication he wrote to his aunt Maria Clemm saying , " I have no desire to live since I have done Eureka . I could accomplish nothing more . " He confided in a friend that he believed his contemporary generation was unable to understand it but that it would be appreciated , if ever , two thousand years later .

Some critics , however , responded favorably to Eureka . French writer Paul Valéry praised it for both its poetic and scientific merit , calling it an abstract poem based on mathematical foundations . Albert Einstein in a letter written in 1934 , noted that Eureka was eine schöne Leistung eines ungewöhnlich selbständigen Geistes ( a beautiful achievement of an unusually independent mind ) .

= = Publication history = =

Eureka was published in a small hardcover edition in March 1848 by Wiley & Putnam priced at 75 cents . Poe persuaded George Palmer Putnam , who had previously taken a chance on Poe by printing his only novel The Narrative of Arthur Gordon Pym of Nantucket in England , to publish Eureka after claiming this work was more important than Isaac Newton 's discovery of gravity . Putnam paid Poe fourteen dollars for the work . Poe suggested an initial printing of at least one million copies ; Putnam settled on 750 , of which 500 were sold that year . Other accounts say that Poe requested 50 @, @ 000 copies , and 500 were printed . Poe was given in advance the full payment of \$ 14 from the publisher .