

# Eureka!

## Edgar Allan Poe's (unintentional) Contributions to Cosmology

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# Preface

To the few who love me and whom I love — to those who feel rather than to those who think — to the dreamers and those who put faith in dreams as in the only realities — I offer this Book of Truths, not in its character of Truth-Teller, but for the Beauty that abounds in its Truth; constituting it true. To these I present the composition as an Art-Product alone: — let us say as a Romance; or, if I be not urging too lofty a claim, as a Poem.

*What I here propound is true:* — therefore it cannot die: — or if by any means it be now trodden down so that it die, it will “rise again to the Life Everlasting.”

Nevertheless it is as a Poem only that I wish this work to be judged after I am dead.

E. A. P.

# Where to begin?

- ◇ “ It is with humility really unassumed — it is with a sentiment even of awe — that I pen the opening sentence of this work: for of all conceivable subjects I approach the reader with the most solemn — the most comprehensive — the most difficult — the most august.

What terms shall I find sufficiently simple in their sublimity — sufficiently sublime in their simplicity — for the mere enunciation of my theme?

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.*”

- Poe, *Eureka*

- ◇ We must first consider the following:
  - ◇ Prankster
  - ◇ Poet
  - ◇ Purveyor of Parody
  - ◇ Progenitor of the PI

# Hoaxes

- ◇ “The Unparalleled Adventures of One Hans Pfall.” (1835)
- ◇ “The Narrative of Arthur Gordon Pym.” (1837)
- ◇ “The Journal of Julius Rodman.” (1840)
- ◇ “The Great Balloon Hoax.” (1844)
- ◇ “Facts in the Case of M. Valdemar.” (1845)
- ◇ “Von Kempelen’s Discovery” (1849)



# Arthur Gordon Pym (aside)

- ◇ R v Dudley and Stephens (1884)
- ◇ *Mignonette* Crew:
  - ◇ Tom Dudley, Captain
  - ◇ Edwin Stephens
  - ◇ Edmund Brooks
  - ◇ Richard Parker, Cabin Boy
- ◇ Shipwreck & Cannibalism



# Ratiocination

- ◇ “Logical Reasoning”
- ◇ *The Murders in the Rue Morgue* (1841)
- ◇ C. Auguste Dupin – the first detective.
- ◇ Solves mysteries by following clues through keen observation and deduction.
- ◇ Inspiration for Sherlock Holmes and Hercule Poirot

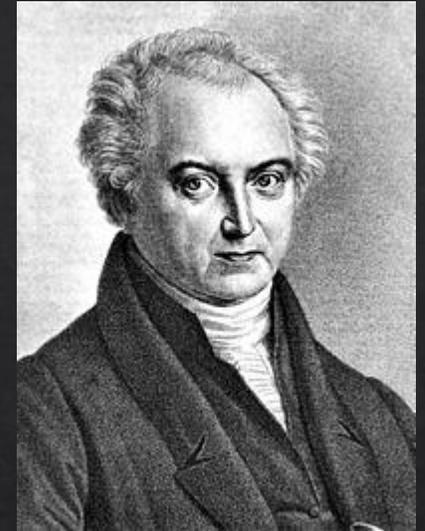
# Alexander von Humboldt

- ◇ 1769 – 1859
- ◇ Explorer / Geographer / Influencer
- ◇ Penned *Kosmos*, a five volume treatise on...well, everything. 1845 – 1862
- ◇ Nature, Geography, Science



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Heinrich Olbers  
(1758 – 1840)

# Eureka - Introduction

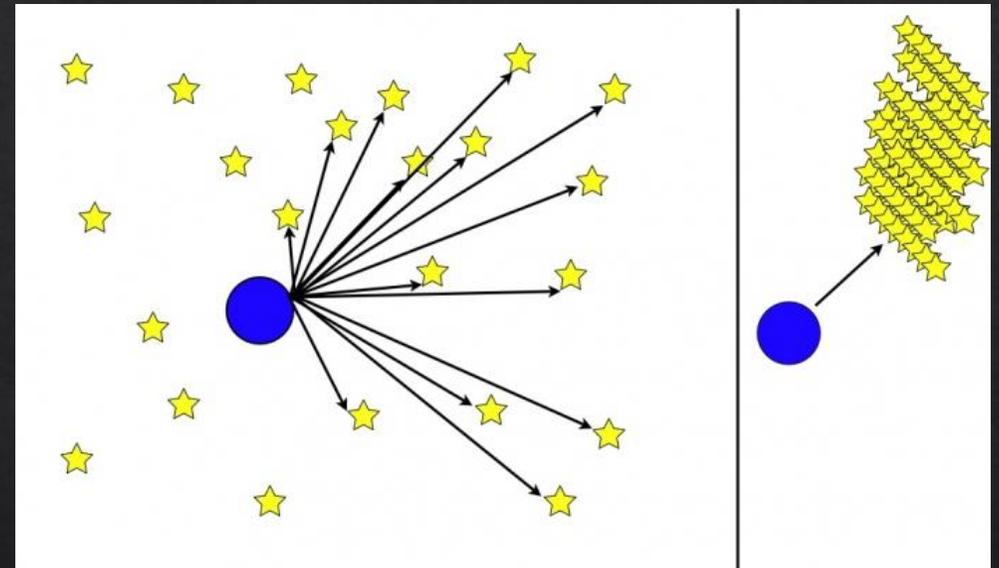
- ◇ Published in 1848
- ◇ Dedication
- ◇ Tone and Style
- ◇ A Letter from the Future
  - ◇ “Aries Tottle”
  - ◇ “Hogg – the ‘Ettrick shepherd’ & “Baconian” thinking
- ◇ Imagination vs. Logic, Reason, & Observation & Limitations
- ◇ Abstract Foundational Concepts (Infinity and the like.)



James Hogg (1770 – 1835)  
Contributor and Character  
in *Blackwood's Magazine*

# Olbers' Paradox

- ◇ **Why isn't the night sky uniformly bright?**
- ◇ In the 19th century, an astronomer named Heinrich Olbers stumbled on a contradiction that could not be easily explained: why doesn't the night sky look uniformly bright? A sky that is uniformly bright would appear to glow, yet our night sky appears black with a scattering of stars, planets, and galaxies dotting the observable sky.



# Poe's Solution

- ◇ The Universe had a starting point.
  - ◇ THIS was revolutionary at the time, the Universe was long thought to be without beginning or end.
  - ◇ The Big Bang Theory nicely solves Obler's Paradox by putting a finite age on the Universe.
- ◇ Therefore the time it would take light from very distant stars would be greater than the age of the Universe.
- ◇ “Were the succession of stars endless, then the background of the sky would present us an uniform luminosity, like that displayed by the Galaxy — *since there could be absolutely no point, in all that background, at which would not exist a star.* The only mode, therefore, in which, under such a state of affairs, we could comprehend the *voids* which our telescopes find in innumerable directions, would be by supposing the distance of the invisible background so immense that no ray from it has yet been able to reach us at all.”
- ◇ Johann Heinrich von Mädler

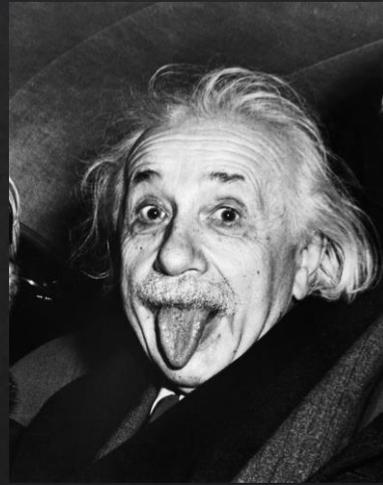


# On Going Questions...

- ◇ The State and Fate of the Universe (Expanding vs. Collapsing)
  - ◇ Poe vs. Modern Science
- ◇ Cycles – “the Heart Divine”
- ◇ Dark Energy and Dark Matter

# Imagination

- ◇ “At times I feel certain I am right while not knowing the reason. When the eclipse of 1919 confirmed my intuition, I was not in the least surprised. In fact, I would have been astonished had it turned out otherwise. Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution. It is, strictly speaking, a real factor in scientific research.”  
– Albert Einstein



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