

ATLANTIS AND THE EVOLUTION OF HUMANITY

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PROLOGUE

It was morning. The villagers had just finished their day-break meal and their devotionals to the Sun who provides all. People headed out to the fields, to the temples, and to the borderlands. Artisans were completing their projects. Skywatchers were worriedly pondering the latest visitors in the daytime heavens. The sky was blue and winds were light.

Without warning, the ground shrieked, the sea exploded, and the smoking horned dragon rose from beyond the horizon. The villagers fled in panic, while several who were prepared gathered their parcels and made their way to the high ground. The devastation was total; very few survived. Those who did were met with joy and fear when they arrived at their new home, recounting the story of God's wrath on their village which had once been so secure and prosperous.

Three generations later, after the latest series of floods, the descendants of the Newcomers would tell of the death of the old country and its rebirth in the new land. They gazed into the stars and into their cooking fires to connect with the spirits of their ancestors and to glimpse for themselves the plan that the Sun had set in motion for them.

INTRODUCTION

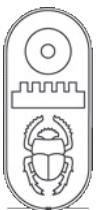
There has long been a debate on Atlantis: did it really exist in time, or only in our minds? If it did exist, then when and where was it located? Early accounts such as Plato's¹ retelling of earlier traditional (oral) accounts from Solon and Egyptian sources² suggest that an early, advanced, and extensive civilization once flourished on an island continent located, according to some translations,³ somewhere west of the Straits of Gibraltar in the Atlantic Ocean. More recent accounts such as those of Francis Bacon⁴ and

Lewis Spence⁵ provide considerable literary detail on the location, physiography, religion, culture, and sequential destruction of the fabled continent that was said to have spanned from Europe to the Americas, with remnants apparently surviving today in the Azores and Antilles.

In this article we will explore several aspects of the Atlantis story. First we discuss the concept of time in its circular and linear natures. We then review evidence bearing on Atlantis as a physical reality and as an allegory. We also look into the fabled story of the Atlantean people in relation to human evolution. We'll see that legends of a "Garden of Eden" and of devastating floods and other geological catastrophes may have been established in widely separated human psyches in response to dramatic changes in their environment driven by variations in the Earth's climate, in conjunction with a natural series of cometary impact events. We then show how the esoteric theme of cyclical regeneration of civilizations that underlies the Atlantis story continues to be important into the present day.

CONCEPTS OF TIME

Time may be considered linear, cyclical, sacred, or profane. Western culture mostly considers time as linear (also referred to as profane), having a beginning and an end. From an Eastern perspective, such as the Hindu tradition, time has a cyclical nature, made of simultaneous involution and evolution.⁶ It divides the cyclical nature of time into various periods: the Manvantara, The Kalpa, the Mahayuga, and the Yuga. Manvantara is the period between the beginning and the dissolution of the universe. It consists of fourteen Kalpas or equal epochs. Each Kalpa is made up of 1,000 Mahayugas (one Mahayuga is said to be 64,800 years



long). Each Mahayuga has four Yugas, and the four Yugas are again repeated in each Yuga. Sacred time is time that can never be exhausted, that is by nature infinite, without a beginning or end. According to Mircea Eliade,⁷ sacred time is irreversible, and therefore the framework of mystical and religious experience. We may say that creation, mystical allegories, and rituals are enacted in sacred time since we can return to it endlessly and it remains the same throughout history and for all people.

THE PHYSICAL ATLANTIS

According to the Primordial Tradition, Atlantis actually existed and was not a figment of Plato's imagination. Some of the arguments used to support the former existence of the continent of Atlantis include: a chain of underwater mountains extending from north to south, known as the Mid-Atlantic Ridge; volcanic mountains on the seafloor that form the Azores and Mt. Pico; vestiges of several submerged cities found near the Azores, Canary Islands, and Cape Verde Islands; fossils common to both African and American continents; religious practices of certain indigenous people in Central America, Africa, Asia with common factors, perhaps implying a common origin; architectural similarity between pyramids of Mexico and Egypt; and the postulate of an advanced civilization prior to the Egyptians. Here we examine the geological arguments for a physical Atlantis.

The Sunken Continent Hypothesis

Despite considerable advances in the documentation and understanding of continental geology from Plato's time through the present day, knowledge of what lies beneath the ocean surface remained mainly conjectural until at least the mid-twentieth century. In 1915 the German geologist and meteorologist Alfred Wegener

first proposed the theory of continental drift which states that Earth's continents slowly drift around the globe.

He proposed that there was a supercontinent 200 million years ago, which he named Pangea, meaning "All Earth." Pangea later broke up into huge landmasses similar to modern day continents. The theory was rejected at the time primarily because it lacked a convincing physical mechanism to cause continental landmasses to move. However, subsequent exploration of the Earth's ocean basins complemented Wegener's database and eventually led by circa 1970 to the theory of plate tectonics,⁸ which is now accepted as a fundamental canon of Earth Science.

According to plate tectonics, the Earth's crust is divided into large thick plates that move atop a soft upper mantle. The continents and the ocean basins move systematically around the globe in concert with convection currents in the underlying mantle. New ocean basins are created at spreading centers (such as the Mid-Atlantic Ridge) and are recycled into the mantle at subduction zones such as those that ring the Pacific Ocean.

At the boundary of the plates significant deformation occurs including earthquakes and volcanoes. For example, when two oceanic plates move away from each other as occurs along the Mid-Atlantic Ridge, seafloor spreading occurs, which creates new ocean floor rocks, having basaltic⁹ rock compositions, from magma solidifying from the hot upper mantle.

When two plates converge, there are three possibilities depending on the type of crust involved. When oceanic crust converges either with another ocean basin or with continental crust, it is transported down into the underlying mantle, due to its high density, where it is melted and recycled. This

"According to the theory of plate tectonics, continents cannot sink because they are of lower density than the underlying mantle."

occurs at a subduction zone, also known as an oceanic trench; many of these occur in Central America and the Mediterranean. When two continental plates converge, mountain ranges are created as the crust is compressed and pushed upwards, such as in the Himalayas. When two plates move horizontally, strike-slip earthquakes are produced, as in California and Turkey.



Figure 1. Combined topography (of continents, above sea level) and bathymetry (of seafloor, below sea level) of the Earth, from National Geophysical Data Center, National Oceanographic and Atmospheric Administration (www.ngdc.noaa.gov/mgg/fliers/00mgg05.html)

Mapping the Topography of the Atlantic Sea Floor

Systematic mapping of the topography of the seafloor was conducted by the U.S. Navy during World War II. Systematic studies were also undertaken to sample and map the ages of seafloor basalts. Similarly, detailed maps of the magnetization of basalts, as the rocks cooled after eruption at the mid-ocean ridges, were compiled during the 1960s. Drilling of the world's oceans as part of the Deep Sea Drilling Project, begun in 1969,¹⁰ demonstrated a systematic increase in age of sediments on the seafloor, from zero at the ridge, where sediments have not yet accumulated, to a maximum at the edges of the opposing continents.

The ages of the sediments, dated by fossils, are consistent with those of the underlying basaltic rocks, dated by radioactive

isotopes (“atomic clocks” that give the time elapsed since the rock formed.)¹¹ Consistent linear structures on the seafloor, called transform faults, were discovered in the mid 1960s and record the movement paths of the opposing continents, such as South America and Africa, away from the mid-ocean ridge, whose shape mirrors those of the two formerly continuous continents.¹²

A map of seafloor topography (called “bathymetry”) is shown in Figure 1. The Mid-Atlantic Ridge bisects the Atlantic Ocean, with the seafloor becoming progressively deeper away from the ridge axis, toward the once-joined continental margins. The ridge shape can be seen to mirror those of eastern North and South America and western Scandinavia, Europe, and Africa. A similar progression can be observed at other locations such as the East Pacific Rise west of South America. If there were a sunken continent of Atlantis, it would be readily visible in the seafloor topography, however, none is present.

Similarly, the distribution of seafloor rock ages (Figure 2) reveals a systematic and regular progression, with zero-age rocks at the mid-ocean ridges and oldest rocks adjoining the continental margins. The age of the oldest seafloor rocks at the edges of the continents gives the date when the opposing continents were joined in the past; this age is the same on either side of the ocean. For example, the North Atlantic opened in Jurassic time, 165

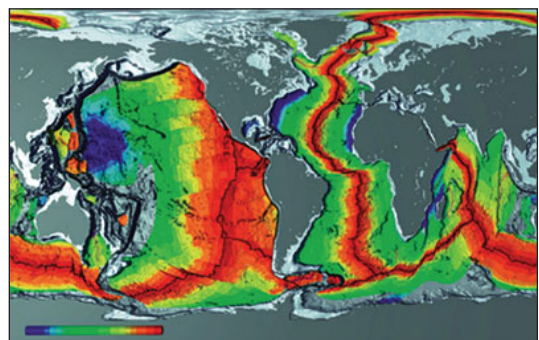
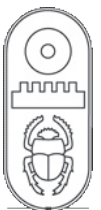


Figure 2. Age of the world's seafloor rocks, from National Geophysical Data Center, National Oceanographic and Atmospheric Administration (www.ngdc.noaa.gov/mgg/image/crustageposter.gif)



million years ago, as can be seen by the blue stripes of color-coded basalt ages against the eastern margin of North America and against the northwest margin of Africa on Figure 2 (and using the color-coded age bar at the bottom of the figure, whereas the South Atlantic opened more recently at 125 million years ago, as seen by the green color-coded basalt ages against the eastern margin of South America and against the southwestern margin of Africa in Figure 2). An Atlantean continental landmass occupying any part of the Atlantic Ocean would have been revealed as anomalous ages superimposed on the pattern shown that is typical of a seafloor spreading environment.

According to the theory of plate tectonics, continents cannot sink because they are of lower density than the underlying mantle. Displacement of a large landmass downward would require a correspondingly large effect to be produced around it, such as upwelling magma (forming major island chains or volcanic plateaus) or uplift of surrounding oceanic or continental crust. What is known about marine and continental geology at this time appears to preclude such large-scale shifts, especially in recent geological times (for example, since circa 50,000 years ago).

Other Alternatives

Is there an alternative that could provide an explanation for legends of floods and geologic cataclysms common to cultures now located in widely separated areas on the Earth? Certainly a legend confined to a single culture could be attributed, following the literal approach, to a local cause; one shared by cultures in a region, such as the eastern Mediterranean, implies a regional-scale cause. However, a common legend that is found on different continents, such as the Americas, Europe, Africa, India, China, as well as on Pacific Ocean islands, implies a physical cause that is global in extent.

Climate Change

One explanation for these recurring legends involves the climatic cycles of various

lengths, as recorded in the timing of continental glaciation, ice cores, tree rings, meteorological records, lake sediments, peat bogs, and isotopes.¹³ A series of shorter climatic cycles of warm/wet and cold/dry conditions is closely associated with variability in the Sun's output.¹⁴ Longer climatic cycles are related to Earth's rotation and to its orbital dynamics around the Sun,¹⁵ such as the about 25,800-year long "great Platonic year," which was noted by Hipparchus¹⁶ in about 130 BCE (BCE - years "Before Common or Christian Era").¹⁷ This "precession of the equinoxes" is caused by gravitational forces from the Sun and the Moon acting on the Earth's equatorial bulge.¹⁸



Figure 3. Map showing the largest extent of continental glaciation during the Last Glacial Maximum. The difference between current and former coastlines is indicated.

Map after that produced by Christopher R. Scotese, PALEOMAP Project, available at <http://geography.about.com/gi/dynamic/offsite.htm?site=http%3A%2F%2Fwww.scotese.com%2Flastice.htm>.

The "sudden"¹⁹ start of the current (Holocene)²⁰ geological epoch at 11,500–11,600 BP (BP - years "Before Present") (9500–9600 BCE) correlates with summer at perihelion (when Earth is closest to the Sun in its orbit)²¹ and with an increased level of oceanic heating relative to today.²² The climate warmed to its maximum (and wettest) level, from 8,400–5,200 BP²³ (6400–3200 BCE), following a brief 200-year long incursion into colder and drier conditions.²⁴ The climate since 3200 BCE and the beginnings of the Common Era was similar to today's except for a brief but significant cold/dry period at 600 BCE.²⁵ In an intriguing hypothesis, Ruddiman²⁶ has identified increased levels of atmospheric

carbon dioxide, due to deforestation (in association with clearing of land for agriculture and production of lumber for buildings and fuel), and methane (a by-product of irrigated rice farming) from about 6000 BCE and about 3000 BCE, respectively. Both of these greenhouse gases may have promoted global warming since that time.

Periods of warmer, wetter, more clement climates favor increased vegetation,²⁷ animal, and human population densities due to increased carrying capacity of a particular area; population density declines markedly during cold/dry events,²⁸ becoming restricted eventually to isolated wet oases. As a result, successive waves of hunter-gatherers and farmers spread culture and language throughout Europe and the Middle East from persistent oases like the Jordan Valley.²⁹

Comet Impacts

Although asteroidal and cometary impacts in the Earth's geologic record are well documented, recent work is providing new detail on impacts occurring during recent times that have affected early civilizations around the globe.³⁰ As outlined by Masse,²⁷ some of these are: (a) the Eltanin impact in the southeast Pacific Ocean, dated at 2.511 ± 0.07 million years ago, and potentially a trigger for global climate change at the Pliocene/Pleistocene geologic boundary; (b) Umm al Binni lake in southern Iraq, which may have affected Mesopotamian cultures around 3000 BCE; (c) Kaali impact, Estonia, around 400–800 BCE; (d) Sirente, central Italy, about 500 CE; and (e) Mahuika, on the continental shelf south of New Zealand, which appears to have generated tsunamis on New Zealand and Australia at 1450 CE and which may also have helped trigger the “Little Ice Age” at that time. Several other examples that would have dramatic effects on the civilizations of the time, including cometary airbursts over South America and impact events in Africa and the Middle East, are considered plausible from physical and/or cultural lines of evidence.

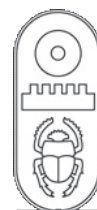
Current work³¹ has discovered a 29 km (18 mile) diameter impact crater on the Indian Ocean seafloor about 1,500 km (932 miles) southeast of Madagascar. Called the Burckle crater and dated at 2807 BCE,³² the effects of this cometary impact are now closely associated with the legendary Great Flood in the Africa–Middle East–India–southeast Asia region²⁷ that would now be dated from a variety of sources at about 2807 BCE. Because comets are usually fragmented, a string of comet fragments probably hit in the Indian and Pacific Oceans, causing tsunamis, fires, dust plumes, atmospheric fallout, and related environmental devastation throughout the inhabited world.

Sudden and rapid rises in sea level following the last worldwide glaciation (since 12,700 BCE) would have progressively flooded the then-exposed continental shelves, forcing human and animal populations living by the sea to continually migrate inland. Climate shifts since this time were also very rapid, from years to at most a few decades,³³ implying replacement of bountiful conditions by famine, and vice versa, within a typical human lifespan.

Combined with volcanic and earthquake activity typical of the Mediterranean,³⁴ Middle East, Indian Subcontinent, and Central and South America, for example, such rapid geological shifts, especially if punctuated by impact events, probably promoted legendary accounts of the destruction of lands-of-plenty among the former inhabitants displaced by such climate-related causes.

THE LEGEND AS AN ALLEGORY

Both Plato and Bacon use the legend of Atlantis as an allegory to promote reflection and social change. Plato sought to praise Greek civilization and to caution against its moral decline. Bacon advocated the advancement of science and technology, instead of politics, as a way to nudge European civilization in a more mystical direction. He saw North America as a clean



slate upon which Rosicrucian mystical ideals could form the foundation of a new culture.³⁵

Both men, especially Plato, based their accounts on a mixture of historical, literary, and esoteric materials. With the fulfillment of Bacon's vision of scientific progress being based on empirical observation and facts, rather than on abstract reasoning,³⁶ many people since then have taken the Atlantis story literally and have speculated upon a variety of locations and historical accounts that would fit the description of Atlantis given by Plato and Bacon. The history of the material world contains many accounts of the rise and fall of civilizations and cultures.³⁷ But the Atlantis story is more than just an historical account—it is the grandparent of rise-and-fall stories, intended both to caution us about moral decay of civilization and to give us hope for a future regeneration to better times. Here we examine this Primordial Tradition and suggest how it is unfolding today.

Philosophers and mystics in many cultures paint a remarkably consistent picture of humanity's place in the universal design. First was the creation (or emanation) of an original set of beings who chose poorly and therefore were banished from the heavenly realm. Then the second phase began, in which the beings would atone for their choice and, after the appropriate work, rejoin their creator. In this sense, Atlantis is just one of many expressions of a universal idea.

Rosicrucians know that inner communication with the intangible universe is possible through meditation and intuition. By tapping into this undercurrent that flows through the universe and all of humanity³⁸—all those alive and all those who have gone before us—we receive impressions that we then interpret and express through the filter of our own experiences, education, culture, and biases. In particular, the record of cyclical regeneration of civilizations and ideas³⁹ parallels the ideas of karma and

reincarnation that are common to many philosophies and religions.⁴⁰ Our self-expression as individuals, and in the larger sense, the collective moral state of our culture, reveal how deeply we have tapped into, and aligned ourselves with, the intangible universe.

Plato and Bacon, like many other mystics, wanted to influence the direction of their cultures. They knew that cultures maintain a tension between the struggles of daily life and the vision of a better, easier, more ideal world. By working on two levels—the physical world and the intangible, esoteric world—they hoped to improve the mystical perception of universal principles of their citizens. This work continues today, and the Rosicrucian Order, AMORC, for example, plays an important role in planting the seeds for positive social change, following in the footsteps of Plato, Bacon, and many others.⁴¹

ATLANTEAN CIVILIZATIONS

The Atlantean story is one of archetypes. According to the Primordial Tradition, Atlanteans lived in harmony with nature. Their government was theocratic and hierarchical, reflecting divine will in mundane government. This resonates with ideas of paradise and an Earthly utopia. Primordial Tradition also relates that there were four successive Atlantean civilizations that may be compared conceptually to the four Yugas of the Hindus.

The number four is of central importance in mystical studies. This number was highly venerated by the Pythagoreans, since according to them, it contained all other numbers. For example, when we add the numbers up to, and including the number four ($1+2+3+4=10$), we obtain ten, which can be regarded as containing all other numbers since all other numbers are multiples of these.

Using the same reasoning, ten can also be theosophically reduced to one, symbolizing the beginning or origin. Mystically,

the Atlantean story can also be interpreted as the story of cycles of human evolution, from the descent of the soul personality into matter and its subsequent growth, maturity, and transition to be reincarnated into another cycle later on.

Our soul personality reflects the divine light of the Cosmic in accordance with our degree of evolution, as the moon is a reflector of the sun's light in accordance with its phases. We may then compare the journey of the collective soul personality with that of the moon through time. Should we choose to consider time as cyclical, we can represent it as a circle.

The collective soul personality, like the moon in its orbit, will begin its evolutionary journey or incarnation at birth/new moon,

progress through youth/first quarter, maturity/full moon, and finally old age and transition/last quarter to reincarnate again in a new cycle. Atlanteans exist in sacred time represented in their Earthly expression as a cross (the number 4). The four Atlantean civilizations may represent beginning, youth, maturity, and old age/transition. The fifth Atlantean civilization then may represent a new beginning and a reincarnation of the collective soul personality. Some reflection and meditation on the above associations may yield some insight into human origins and evolution.

According to hermetic philosophy, that which is below is like that which is above. The physical or New Atlantis will materialize as we as a culture recognize and realize our own paradise within.

Endnotes:

¹ See www.activemind.com/Mysterious/Topics/Atlantis/timaeus_and_critias.html.

² Julie Scott, "The Mystery Schools and the Rosicrucian Order, AMORC," *Rosicrucian Digest* 84, no. 1 (2006): 2–7.

³ See different viewpoints on Plato's geography in the abstracts to the International Conference on *The Atlantis Hypothesis: Searching for a Lost Land*, held July 11–13, 2005, on Milos Island, Greece, <http://geology.about.com/gi/dynamic/offsite.htm>.

⁴ <http://www.levity.com/alchemy/atlantis.html>.

⁵ Lewis Spence, *The History of Atlantis* (1924; New York: Bell Publishing, 1968).

⁶ <http://www.indiaheritage.org/rendez/article1.htm>.

⁷ <http://www.westminster.edu/staff/brennie/eliade/mebio.htm#Thought>.

⁸ An accessible account of marine geology and geophysics is given by Adolphe Nicolas in *The Mid–Oceanic Ridges: Mountains Below Sea Level* (Berlin: Springer–Verlag, 1995).

⁹ See <http://www.casdn.neu.edu/~geology/department/staff/colgan/iceland/minerals/basalt.htm> and <http://en.wikipedia.org/wiki/Basalt> for information on basalts on the continents and seafloors.

¹⁰ Nicolas, *Mid–Ocean Ridges*, p. 10.

¹¹ <http://pubs.usgs.gov/gip/geotime/radiometric.html> provides a compact summary of several common isotopes and how they provide ages of rocks; see also <http://en.wikipedia.org/wiki/Isotope>.

¹² See Nicolas, *Mid–Ocean Ridges*, 8–10, for a clear illustration of the opening of the Atlantic Ocean in response to the divergent movement of the continents.

¹³ An exceptionally penetrating and lucid treatment can be found in the text by Jonathan I. Lunine, *Earth: Evolution of a Habitable World* (Cambridge University Press, 1999).

¹⁴ Frank M. Chambers, Michael I. Ogle, and Jeffrey J. Blackford, "Palaeoenvironmental evidence for solar forcing of Holocene climate: Linkages to solar science," *Progress in Physical Geography* 23, no. 2 (1999): 181–204.

¹⁵ Lunine, *Earth: Evolution*, 249–252.

¹⁶ www.crystalinks.com/precession.html (accessed 7/17/06).

¹⁷ http://en.wikipedia.org/wiki/Common_Era (accessed 9/11/06).

¹⁸ <http://en.wikipedia.org/wiki/Precession> (accessed 7/17/06).

¹⁹ Jonathan Adams, Mark Maslin, and Ellen Thomas, "Sudden climate transitions during the Quaternary," *Progress in Physical Geography* 23, no. 1 (1999): 1–36.

²⁰ See <http://en.wikipedia.org/wiki/Holocene> and http://en.wikipedia.org/wiki/Geologic_time_scale for explanations of the Holocene, Pleistocene, and previous geological time intervals.

²¹ Lunine, *Earth: Evolution*, 251.

²² Lunine, *Earth: Evolution*, 279.

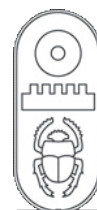
²³ Chambers et al., "Palaeoenvironmental evidence."

²⁴ Adams et al., "Sudden climate transitions."

²⁵ Jonathan Adams and Marcel Otte, "Did Indo–European languages spread before farming?" *Current Anthropology* 40, no. 1 (1999): 73–77.

²⁶ W. F. Ruddiman, "The anthropogenic greenhouse era began thousands of years ago," *Climate Change* 61 (2003): 261–293; see also William F. Ruddiman, *Plows, Plagues and Petroleum: How Humans Took Control of Climate* (Princeton, New Jersey: Princeton University Press, 2005).

²⁷ Konrad A. Hughen, Timothy I. Eglinton, Li Xu, and Matthew Makou, "Abrupt tropical vegetation response to rapid climate changes," *Science* 304, no. 5679 (2004): 1955–1959.



- ²⁸ Adams and Otte, "Did Indo-European languages spread?"
- ²⁹ Ibid.
- ³⁰ W. Bruce Masse "The archaeology and anthropology of Quaternary Period Cosmic Impact," *Comet/Asteroid Impacts and Human Society*, ed. P. Bobrowsky and H. Rickman (Berlin: Springer, forthcoming).
- ³¹ D. H. Abbott, W. B. Masse, D. Berger, L. Burkle, and P. Gerard-Little, "Burckle abyssal impact crater: Did this impact produce a global deluge?" (paper presented at the International Conference on *The Atlantis Hypothesis: Searching for a Lost Land*, held July 11–13, 2005 on Milos Island, Greece, 2005); and Dallas H. Abbott, Suzane Martos, Hannah Elkington, Edward F. Bryant, Viacheslav Guliakov, and Dee Breger, "Impact craters as sources of megatsunami generated chevron dunes," (paper presented at Geological Society of America, Winter Meeting, 2006).
- ³² Dallas H. Abbott, Lloyd Burkle, Perri Gerard-Little, W. Bruce Masse, and Dee Breger, "Burckle abyssal impact crater: Did this impact produce a global deluge?" (working paper, 2005).
- ³³ Adams et al., "Sudden climate transitions."
- ³⁴ For example, the destruction of the island of Santorini, described in <http://www.decadevolcano.net/santorini/atlantis.htm>.
- ³⁵ <http://www2.kenyon.edu/Depts/IPHS/Projects/Stella/Bacon.htm>.
- ³⁶ http://en.wikipedia.org/wiki/Scientific_method; and <http://www.batesville.k12.in.us/Physics/PhyNet/AboutScience/Inductive.html>.
- ³⁷ For example, see Paul Kennedy, *Rise and Fall of the Great Powers: Economic Change and Military Conflict From 1500 to 2000*. 1987.
- ³⁸ Carl Jung was a proponent of the "collective unconscious;" see http://www.cgjungpage.org/index.php?option=com_content&task=view&id=743&Itemid=54; and <http://www.kirjasto.sci.fi/cjung.htm>.
- ³⁹ As an example, the Egyptians and later the Greeks concluded that the Earth was a sphere. Later, the Earth was regarded as a flat plate ringed by uncrossable oceans. Since the time of Copernicus and Galileo, and certainly today, the Earth is known to be a sphere again.
- ⁴⁰ For example, see <http://en.wikipedia.org/wiki/Karma>; and <http://en.wikipedia.org/wiki/Reincarnation>.
- ⁴¹ The authors thank Steven Armstrong for discussions that motivated and improved this paper. Dallas Abbott and Bruce Masse kindly provided abstracts and preprints of their scholarly research in advance of publication.

The green and greedy seas have drowned
 That city's glittering walls and towers,
 Her sunken minarets are crowned
 With red and russet water-flowers.

In towers and rooms and golden courts
 The shadowy coral lifts her sprays;
 The scrawl hath gorged her broken orts,
 The shark doth haunt her hidden ways.

But, at the falling of the tide,
 The golden birds still sing and gleam,
 The Atlanteans have not died,
 Immortal things still give us dream.

"Fragments" (1914)
 John Masfield
 Poet Laureate of Great Britain, 1930 - 1967