Anthropology: One Million AD

By Clark M Thomas © July 20, 2019

One million years from now is a long time in human history, but it's merely a blink of the proverbial eye in geological time. What we humans call historical time could also be two proverbial eye blinks for arriving aliens within their time, as they puzzle the last years of humanity and all the other species we destroyed.¹

There is a popular idea that benevolent aliens have long been literally among us. Ancient alien television shows suggest that many cultural and technological gains are only due to benevolent aliens. This cozy meme is a pseudo-scientific parallel to the "our tribal god is good to us and for us" faith deeply embedded in persistent Bronze Age religions.

If there actually have been helpful space aliens among us, then they are no smarter than our naïve ancestors. None of us were alerted to the dangers of industrial climate catastrophe within the context of overpopulation. An extreme cynic might think that such space aliens may not have been so benevolent. If they were as smart as imagined, then they have withheld critical knowledge. Maybe they wanted all along to clear us out, making it very easy to repopulate the Earth with their own kind.

What if no aliens have visited Earth in the last million years? *If highly sentient aliens were only to arrive one million years from now*, what would they discover? What would they think? How would they piece together the lost last centuries of our wildly

¹ https://phys.org/news/2017-09-mathematics-sixth-mass-extinction.html

successful, but blindly suicidal, species? Would our tragic history "teach them a lesson," or would they write us off as just another failed "advanced" life form briefly on a promising water planet?

This essay is focused on future alien social anthropologists, as they might inspect the residual clues of human history on Earth. *If aliens were to arrive within the next few centuries*, there would still be sufficient evidence of our lives to piece together a model. Of course, how and when we vanish is critical. We could vanish from unforeseen climate catastrophes, but that alone would not erase our tracks immediately. Climate crisis plus a Murphy's Law global thermonuclear war would accelerate the process, but a thousand years from now there would still be some very sturdy residue.²

An alternative, but less likely, scenario would allow enough time for humans to create *self-sufficient, android comphuman societies*. Ethical philosophical life forms could be much more resistant to climate change than are our squishy protoplasmic bodies. Any ideal scenario inside climate chaos also avoids thermonuclear negation. It is thereby possible that *well before a million years from now* the Earth could host a fully functional network of ethically conscious AI beings not driven by brain stem reflexes. Earth's wise comphumans could ironically become the aliens visiting blue planets in our local arm of the Milky Way.

We now model aliens visiting depopulated Earth a thousand thousand (million) years from now. That will allow for nearly all traces of our reckless society to vanish. Alien anthropologists will find enough evidence to detect that something extraordinary once existed here, the nature of which would not be initially clear.

Even though most traces of modern civilization will vanish within just one thousand years, a diminished biosphere will persist. Our sun is stable, and there may remain a window of opportunity for some forms of advanced life to repeatedly develop

² https://www.youtube.com/watch?v=Wy7Q6wazD_E

over more than a billion years, or a thousand thousand thousand years! (That seems like a lot of time, but remember our local visible universe is almost 12 billion years old; and that doesn't even factor in the far older universe of universes, the multiverse.)

After humans and advanced protoplasmic life forms vanish from extreme climate change, including ocean acidification, the planet will slowly cool off due to land and aquatic vegetation reclaiming excess atmospheric carbon, and of course from no more new human-generated greenhouse gases. *Earth a million years from now could look quite inviting* to curious space alien arrivals – somewhat similar to what colonizing Europeans thought of the "new world" after their "old world" diseases eradicated nearly 90% of the heathen aboriginals, according to God's plan.

Earth has shifting plate tectonics, leading to high mountains such as the Appalachians, with pre-dinosaur ocean trilobite fossils, some of which I have unearthed. However, not much happens with crustal plates over just one million years. There won't be much deep evidence of human civilization for alien geologists to unearth. However, there will be residual quarries in places like the copper pit in Bisbee, AZ; and coal mountains in West Virginia with flat tops. There will be storage bunkers in Nevada for nuclear waste. There will be random glass and plastic to amaze and confuse the new arrivals. Earth a million years from now will be beautiful, but creepy, to the likes of our eyes.

An inspiration led me to write this essay, and here it is:

Alien anthropologists a million years hence will easily discover a trove of excellent examples of human civilization, but not on Earth. They won't need to dig in our biospheric soil to reveal our cultural mysteries. Mysteries will be preserved inside the moon.

The moon's distinctive appearance owes much to its origins several billion years ago when there were many more large rocks floating around the young solar system. Many rocks hit the early Earth, but tectonics and an active atmosphere have erased most of their signatures. The airless moon, in contrast, started out as a giant glob of Earth ejecta from a Mars-sized impactor. Gravity quickly formed what we see today into a sphere. Then came a period of large impacts on our moon, the residue of which is mostly preserved.

Much of the moon's surface is dark basaltic "maria," which is the plural Latin name for seas. One example is the famous Sea of Tranquility. Elements of the pre-Galilean human face on our visible moon are dark areas of lava flows caused by the great kinetic energy of large impacts. Those flows long ago ceased, but only after a number of lava tubes were formed. We can see similar lava tubes near active volcanoes on Earth. The moon does not have volcanoes, because it doesn't have a permanent molten core and shifting plates.

I recommend the *Wikipedia* article on lunar lava tubes.³ This information with photos clearly suggests where the occupying astronauts should go to survive and prosper a few feet below the hostile lunar surface. From that temporary permanency, until resupplies stop, and later our species on Earth fades away – all sorts of human artifacts will be randomly abandoned in nearly pristine form inside previously occupied time-capsule tubes.

Some people are looking with dreamy eyes at a terraformed Mars as our future home, which does *not* square with reality.⁴

I recommend that "people in the know" later in this century clearly and separately deposit very robust time-capsules for future anthropologists. When they find the occupied lava tubes, they will also find our intentional historical and cultural treasures. Maybe the residue of our cultural and technical artifacts can help reclaim for distant posterity the presently absurd "sapiens" in *Homo sapiens*.

³ https://en.wikipedia.org/wiki/Lunar_lava_tube

⁴ http://www.astronomy-links.net/MarsColonies.html