

AN ALCHEMY FOR THE ANTHROPOCENE

As we work to comprehend the epoch of the Anthropocene, of Anthropos, in recognition of humanity's apparent domination of Earth's "critical zone," where its life-systems actively reside, I will attempt to show how alchemy's psychological, spiritual, and poetic elements have become relevant again.

Although in the late 1980s, American biologist Eugene Stoermer offered the term Anthropocene, it was the Dutch chemist Paul Crutzen who, in 2000, brought attention to it at a meeting of geologists. However, the Anthropocene only gained eight years later, when British geologist Jan Zalasiewicz led a movement to adopt the Anthropocene as a formal geological epoch, the first since the Holocene, which began around 11,600 years ago, which announced the end of the last Ice Age. As far as we know, the Holocene was the planet's the most stable period in the Earth's more than 4 billion year history, with average global temperatures varying not more than plus/minus 1 degree Celsius. With this stability, and the disappearance of many large game animals, partly from human over-hunting, Homo sapiens emerged from being solely hunter-gatherers, to growing and storing food.

What followed over the subsequent centuries of favorable weather was a long transition during which campsites became settlements that grew into towns, some of which (usually those located along waterways that expedited commerce) grew into the modern cities we know today.

In 2016, the Anthropocene Working Group (AWG) of the International Union of Geologic Sciences formally adopted the Anthropocene as "the present geological time interval in which many conditions and processes on Earth are profoundly altered by human impact."¹

However, even though geologists get to name the epochs, which are based on evidence found in the planet's strata, the immediate and future ramifications of the Anthropocene are not only geological, but, for example, as the planet's topsoil, essential for human life as we know it, is rapidly being depleted, the ramifications are economic, political, social, even spiritual.

Although exactly when the new epoch began remains contested, the AWG puts it at around 1950, a time some economists call the Great Acceleration, when world economies began recovering from World War II armed with technological innovations invented during the war, when a middleclass population of hungry consumers began to appear, at least in Western countries, and when soldiers returning from the war began making families; that is, the human population began growing again. Added to this was the deadly radiation released by above ground testing of nuclear weapons by the United States and the Soviet Union.

As early as 1778, Georges-Louis Leclerc de Buffon wrote that “the entire face of the Earth today bears the imprint of human power,” which he thought was positive, because humanity would be able to “modify the influences of the climate it inhabits, and set the temperature to the level that suits it best,” as if we could invent a planetary thermostat.² Such naivety continues today with, for example, geoengineers who propose to slow down, if not reverse, the rise in temperature with massively impacting technologies that could have disastrous irreversible effects on the entire planet.

Whenever the Anthropocene is thought to have begun, we can no longer ignore that we are in what the philosopher Bruno Latour calls “a new climatic regime,”³ a narrow window within which, if our species and countless others are to survive, we must change our way of living, our politics, and the structure of our economies. Clive Hamilton, an Australian Professor of Public Ethics, wrote:

”It is prudent...to regard Gaia (the ancient Greek Earth Goddess adopted by biologist James Lovelock to represent the Earth as a living, self-regulating, system) not as the all-loving, all-nurturing Mother Earth of the romantics. We must also consider Gaia as an archetype of our own creation.”⁴



With “Gaia as an archetype of our own creation” in mind, it becomes apparent that the study of Archetypal Psychology

has an important role to play in developing the consciousness needed if our species is to avoid breaching the worst of this century’s “tipping points,” past which there is no return to the parameters within healthy human and other-than-human populations are sustainable. *Every intervention by a human actor is psychological in nature.*

From a cultural standpoint, we need languages that give voice to compassionate and mutual relationships with, not the capture and exploitation of, other-than-human species. It is also time take a fresh look at religious systems that over the centuries have organized into ritualistic, male-dominated, ridged power structures that cannot change, certainly fast enough, to meet the spiritual and ethical challenges of this dynamic time.

On the other hand, alchemy, an ancient practice that was essentially integrated into modern chemistry, needs to, and can, be reimagined for this century.

The etymology of “alchemy” stems back to the Egyptian *Kem*, meaning the black earth of the Nile’s overflowing fertility, to which Arabic added the prefix *Al*. Or perhaps it originally meant the Black Art; e.g., the chemistry of embalming which Ancient Egypt rose to an art. *Kem* also means “the pupil, or black, of the eye.” Egyptian alchemy was also bound to the cyclical rebirth of the sun. Another possible route of alchemy’s journey to Medieval Europe was from China, via the Silk Road, “alchemy” possibly being a mispronunciation of the Chinese *kiem-yak*, which means Golden Liquor.

The first record of alchemy in China addresses the ingestion of a so-called “elixir of immortality,” recorded around 60 BCE. However, as Alan Watts put it, “In gullible enthusiasm for this quest, more than one Chinese emperor died of the fabulous concoctions of powdered jade, tea, ginseng, and precious metals prepared by Taoist priests.”⁵ Also cinnabar, what the Chinese called “Dragon’s blood” and we call mercury, was a common ingredient.

Besides “salvation by ingestion,” Chinese Taoism developed an internal alchemy, called The Way of Complete Perfection. Here a Golden Elixir is made by opening various channels, using visualization and “embryonic breathing,” or “closed circuit respiration.” The West is familiar with these channels, or meridians, which for Taoists are “the dragon’s pulse,” as the flow of *ch’i* in acupuncture, acupressure, Qi dong, and martial arts such as Aikido.

Exploring even further back into our alchemical past, we find that red ochre, or Hemalite, which stems from the Greek word for blood,

a mineral that becomes a darker when heated to a particular temperature. Archeologists have recently found that between 150,000 and 250,000 years ago humans in Africa began heating ochre to change, or deepen, its color. It could be that the red substance was used to decorate one’s body, making cosmetology our oldest form of art.



Medieval European alchemists also monitored what stage their opus was in by its color. Japan’s alchemy is the art of sword-making, whose line of master swordsmiths continues unbroken to this day. It also depends on color for gauging the temperature in the making of its base metal, called *tamahagane*, or “round and precious steel.” The colors Medieval European alchemists recognized as significant to their work were black, white, yellow, and, of course, red. James Hillman wrote that “yellow signifies a particular kind of change---usually for the worst.”⁶ However, yellow is also the color of egg yoke, signifying new life is on its way.

Although alchemists take various paths, they always begin with a *prima materia*, such as what the historian of science turned theorist of poetics, Gaston Bachelard, calls the “unpleasant matter” that is mud.⁷

In the three volume *Textures of the Anthropocene: Grain Vapor Ray*, the authors of its Manual wrote that

“Mud is...All in all a sticky, nebulous, highly unstable medium of constant transformation that carries—no, that *is*---latent heat and kinetic energy. It is a transitory medium, its materiality the incorporated manifestation of various conditions of flux and flow...It is the sum of all information.”⁸

(Some quantum physicists believe that, at bottom, what the universe consists of is information.) In Western religions' creation story, Adam is created of earth; so that mythically we are born from earth, from mud, and we return to become its *prima materia*. There are many creation stories like this, including the sixteenth-century creation of a "golem" from clay.⁹



While C.G. Jung saw the world in dualities—female/male, anima/animus, etc., Aaron Cheak, a scholar of comparative religion and esotericism, wrote: "If alchemy appears elusive, it is precisely because it cuts across categories ordinarily seen as mutually exclusive. For this reason, alchemy may be better approached not so much as a fixed domain of activity, but as a nondual *process*."¹⁰

Thus, Alchemy can be seen as process in whose apparatus borders, fences, walls, nationalities, sexes, all categories of things and being are dissolved.

Usually when we talk about transition it is from one stable state to another. However, in alchemy, as Jung said, there are always "additional circulations;" or "boundless amplifications." Karen-Claire Voss adds: "Their method was to seize upon and then contemplate such amorphous things as 'dreams, visions, mythic symbols, portents, signs, etc., at length, with a marked degree of intentionality, i.e., active imagination."¹¹ Alchemy is a bubbling up of the collective unconscious, a dynamic functioning of life itself. Which takes us to one theory as to how and where life began on Earth; e.g. in deep hydrothermal vents in the ocean's floor that spewed up key hydrogen-rich molecules.

An organism's transit through the stages of its life and into what we call death, which is, in practice, its joining the mineral life of the planet, becoming-earth, are all an alchemical process.

In his introduction to *Jung on Alchemy*, W. Schwartz-Salant wrote that "Alchemy is an old science, but also a new science that is only now beginning to unfold. It reflects upon the mystery of relations between things, and upon one's relationship to the cosmos."¹² This points us toward a contemporary alchemy in which the heart of alchemical operations is not about changes but exchanges, and how the Earth's circulatory systems exchange fluids, gases, minerals, etc.

We can't say that we weren't aware of how our thirst to manufacture and possess things, and to reproduce our own kind, have been impacting the Earth long before the Anthropocene leaped from scientific journals into popular culture. Of course, with or without us, this amazing planet will continue to explore various and unimaginable evolutionary paths. However, "our task now," writes Clive Hamilton, "is to refrain from

aggravating further an entity vastly more powerful than we are, and whose ‘psychology’ we barely understand.”¹³

Will our politics and economics change in time to forestall the end of modern civilization? Will the human species have to become “post-human” in order to survive, and what would this mean? Will biotechnology be the central concern of a new alchemy? Are algorithms alchemy’s current formulas for making gold (profit), or the Philosopher’s Stone (wisdom)? These are just a few of the questions arise from the contemplation of an alchemy for the Anthropocene.

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Endnotes

1. Anthropocene Working Group (21 May 2019) <http://quaternary.stratigraphy.org/working-groups/anthropocene> (Accessed 4/2020)
2. C. Hamilton, C. Bonneuil and J-B Fressoz, “Thinking the Anthropocene.” Introduction to, *The Shock of the Anthropocene*. London and New York, 2016. p.4.
3. B. Latour. *Down to Earth: Politics in the New Climatic Regime*. Cambridge UK, 2018. In note 2, Latour cites his book, *Facing Gaia: Eight Lectures on the New Climatic Regime*, Cambridge, MA., 2017, as being where this expression is developed.
4. C. Hamilton, “Human Destiny in the Anthropocene.” *The Anthropocene and the Global Environmental Crisis*. London & New York, 2017. p.40.
5. A. Watts. “The New Alchemy.” In, *This is It and Other Essays on Zen and Spiritual Experience*, New York, 1973. p.127.
6. J. Hillman. “The Yellowing of the Work. In, *Alchemical Psychology: James Hillman Uniform Edition 5*. Putnam, CT., p.205.
7. G. Bachelard. “Soft Matter: The Valorization of Mud.” *Earth and Reveries of Will*. Dallas, 2002. p.85.
8. A. Sepahvand, C. Rosol, K. Kligen, *Textures of the Anthropocene: Grain Vapor Ray*. Cambridge, MA and Berlin, 2015. *Manual*, p.29.
9. There are numerous stories and and novels in which the golem appears. One novel I particularly like is M. Piercy, *He, She and It*. New York 1991.
10. A. Cheak. “Circumambulating the Alchemical Mysterium” A. Creak, ed., *Alchemical Traditions*. Melbourne, 2013. p.32
11. K.C.Voss. “Imagination in Mysticism and Esotericism: Marsilio Ficino, Ignatius de Loyola, and Alchemy.” *Studies in Spirituality*. No. 6.1996.
https://www.academia.edu/20930513/Imagination_in_Mysticism_and_Esotericism
12. W. Schwartz-Salant. C.G. Jung on Alchemy. Princeton NJ, 1995. p.19.
13. C. Hamilton. *Ibid*.