# Alchemy as a Noetic Science: Esoteric Correspondences

#### Abstract

This paper examines the empirical validity of alchemical theory and pursuits. It critically addresses the viability of metallic transmutation; whether esoteric correspondences (i.e., the planet-metal connections) might exist in any objective sense and whether they hold up when subjected to empirical scrutiny; as well as how its animistic paradigm and principles of transformation might be connected to more innovative and radical ideas that are now emerging or have emerged within the nomothetic disciplines. The groundbreaking experiments and unprecedented findings of the anthroposophists Frau Lily Kolisko and Agnes Fyfe–"eureka moments" corroborating the veridicality of a system of hidden knowledge propagated by the animistic counterculture are discussed within the menacing backdrop of an antagonistic orthodox Cartesian-Kantian epistemological worldview. The author juxtaposes this phenomenon with an analogous parallel process in the turbulent history of clinical neurology and in doing so underscores the important role that intellectual climate and dominant philosophical attitudes play in legitimizing "fringe" or "anomalous" phenomena.



*Figure 1.* Mixed medium painting of butterfly-headed goddess and crowned lion with the words *Secret Desire Transformed.* The painting showcases some very common alchemical leitmotifs and symbols associated with transmutation. Copyright [November 2024] by Elena Ray/Stock Photo. Reprinted with permission.

# Alchemy: The Black Art

In contemporary terms, the word "alchemy" is synonymous with magic and evokes images of medieval maverick men at work in their subterranean laboratories trying to create a scintillating saffron powder able to transmute base metals into gold. There are strong associations with historical figures like Carl Jung, Jacob Boehme, and Paracelsus van Hohenheim, chemistry, mysticism, pseudoscience, the occult, and speculative philosophy. It is loosely defined as the art and science of transformation. Etymologically, it derives from the Greek *chymeia*, meaning "to cast or smelt" and the Egyptian *kemet*, meaning "black earth" (Kiritsis, 2024).

More specifically, it is both a chemico-operative [physical] and spiritual discipline with philosophical and practical dimensions that first coalesced within the intellectual melting pot of Alexandria, Egypt, during the Ptolemaic Period [c.300 BCE] and late antiquity [c.200-600CE] (Katz, 1978). Alchemy assimilated ideas from Eastern mysticism, the Hermetic, Neoplatonic, and Gnostic traditions, Aristotelian theories of matter, the Egyptian metallurgical crafts, astrology, and the ancient mystery schools (Haage, 2006). It subscribed to an animistic cosmogony where "All is One" and constituents of all natural kingdoms [mineral, plant, animal] had an animating force or "soul" (Kiritsis, 2024).

Alchemists were chiefly concerned with replicating and augmenting processes they observed in nature in artificial settings (i.e., diamond body from carbon), usually a laboratory. By the time the celebrated father of iatrochemistry, the Swiss alchemist and doctor Paracelsus (c. 1493-1541), came along seeking "a universal knowledge," the tradition had become heterogeneous in both philosophical scope and practice and was intimately concerned with the following outcome goals, among other things: (a) *chrysopoeia* (gold-making) and *argyropoeia*  (silver-making) through metallic transmutation, the transformation of base metals like lead and tin into silver and gold, (b) the preparation of the Philosopher's Stone, also called the *ultima materia*—the scintillating white and red powders that could transmute base metals into silver and gold, respectively, (c) *spagyria*, the concoction of herbal medicines through alchemical processes like distillation and sublimation, also a popular endeavor carried out in laboratory settings, (d) attempts to create artificial life forms known as *homunculi* in an alchemical vessel, an alembic, and (e) the preparation of drinkable gold called *aurum potabile* which was used as an antidote for many ailments (Thompson, 1990).

In hindsight, it may be germane and historiographically appropriate to speak of alchemy in pluralistic terms-the alchemies-for the purpose of honoring idiosyncratic permutations of the discipline that were sociohistorical outgrowths of very disparate philosophical and religious climates. For instance, in the sixth century AD, the Neoplatonic philosopher Olympiadoros the Younger practiced alchemy as a spiritual quest for ascension of the soul (Versluis, 1988). On the other hand, the Arab alchemists Jabir ibn Hayyan and Rhazes introduced quests for a panacea or universal elixir and its preparation from mineral, plant, and animal products into the philosophical and technical discourse (Haage, 2006). By the nineteenth century, writers like Mary Ann Atwood were arguing in favor of a purely spiritual interpretation whereby the soul of the alchemist was credited with demiurgic and esemplastic powers channeled through mesmeric trances (Atwood, 2012). More recently, Carl Gustav Jung-arguably the greatest interpreter of the Western esoteric tradition-equated and redefined stages of the alchemical opus in the context of psychological processes like individuation and integration of the ego-Self axis, pontificating that so-called alchemical processes are purely projective in nature (Maillard, 2006). Without a doubt, the ancient discipline has resonated deeply with influential philosophers, theologians, and protoscientists across time and consequently infiltrated and influenced Western pedagogy and its realworld application in many of its contemporary forms and guises–sociology, mythology, visual art, science, psychology, and medicine.



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## The Magnum Opus, or The Great Work

Hence, when alchemists relayed details of their practical work in laboratory settings, they described an abstruse process characterized by distinct phases based on coloration and mediated by seven planetary powers. Under this animistic paradigm and system of knowledge, each planet was ascribed rulership over specific constituents in the mineral, plant, and animal kingdoms. The planet-metal relationship was especially overstated in alchemical manuscripts because of its central role in the creation of the Philosopher's Stone. Saturn was inextricably connected with lead, Jupiter with tin, Mercury with quicksilver, Venus with copper, the Moon with silver, and the Sun with gold, the most illustrious and ostensibly incorruptible metal (Haage, 2006). The Sungold and Moon-silver connections are primordial, having existed since prehistoric times. Then came the innovations of late antiquity-Venus-copper, Mars-iron, and Saturn-lead-and last but not least, the Mercury-quicksilver and Jupiter-tin dyads which took shape under the auspices of the Middle Ages. While differences in opinion existed between novice and seasoned practitioners of the esoteric art when it came to the sevenfold or twelvefold alchemical process by which the Philosopher's Stone was concocted, the planet-metal relationships remained impervious to conceptual amendment and extraordinarily consistent across time.

The overwhelming squadron of alchemists describe the following process: the Saturnine, Jovial, and Lunar forces "lunarized" the base matter by galvanizing chemical processes such as calcination, solution, and putrefaction, which brought about the *nigredo* (putrefaction) and the *albedo* (whitening) in the sealed vessel (Burckhardt, 1986). Successful completion of the whitening phase bestowed upon the alchemist the gift of the "white stone," the power of healing ailments and of transmuting base matter like lead or mercury into silver. Further operations were then carried out under the patronage of the Venusian, Martian, and Solar forces, which "solarized" the just formed "white stone" through chemical reduction, sublimation, coagulation, and fermentation (Burckhardt, 1986). The subsequent reactions brought about distinctive colorations known as the *citrinitas* (yellowing) and *rubedo* (reddening), and culminated in the synthesis of a scintillating red powder of significant weight known as the "red stone" (Humburg, 2011).

Known by other cryptic terms like *ultima materia* or Philosopher's Stone, the "red stone" was the alchemists' coveted and zealously guarded secret—with it, a practitioner could wield extraordinary esemplastic powers and either transmute base metals to gold or prolong human life indefinitely. Orchestrated under the patronage of Saturn, Jupiter, and the Moon, the creation of the "white stone" comprised what alchemists typically alluded to as the Lesser Work; on the other hand, the preparation of the "red stone" under the patronage of Venus, Mars, and the Sun was referred to as the Greater Work (Burckhardt, 2012). The protean Mercury, a planet-metal comprising the preliminary stage, was never ascribed rulership over a specific phase in its own right because it was deemed vital to the alchemical process as a whole.

#### **Questions of Empirical Validity**

The author of Hermeticism, Nick Kollerstrom, examined the planet-metal connection in his book, *The Metal-Planet Relationship: A Study of Celestial Influence* (1993). He found that in five out of the seven astrological charts he examined depicting the precise moment a master alchemist transmuted a small quantity of a base substance into gold, the planet Mercury and the sun were within five degrees of one another. In four of the astrological charts that Kollostrum examined, the base metal used was red mercury. The other two were lead and silver, the metals of Saturn and the moon. Predictably, then, the astrological charts immortalizing these epic transmutations of lead into gold and silver into gold should clearly depict a celestial situation where there is no more than five degrees of separation between Saturn and the sun, and the moon and the sun, respectively.

Kollostrum's findings indicate that Earth's seasonal rotation and the astrological movement are key players in so-called metallic transmutation. It is exactly as the Hermetic tenet decrees: that which is above exerts a subtle but necessary influence on that which is below. And what of the esoteric correspondences? Does a qualitative, empirically verifiable connection between lead and Saturn, quicksilver and Mercury, silver and the moon, and gold and the sun actually exist as to render the planetary conjunction-affects-metals hypothesis viable, or somewhat viable even? Were our ancient ancestors on to something or were they barking up the wrong tree?

Skeptics and scoffers who remain fiercely faithful to the hegemony of orthodox science with its myopic focus on eliminative materialism, quantitative analysis, and the established nomothetic laws may dismiss these claims as too progressive and radical, or worse still, as iconoclastic and sacrilegious. The conceptual chasm separating them from the curious eyes and rational minds of those who are perpetually informed by the dominant scientific paradigm is just too wide to inspire awe and galvanize inquiry in an impartial and systematic way. Hope of examining phenomena impartially and approaching contentious issues with an open mind necessitates the temporary suspension of disbelief and a necessary suppression of rigid beliefs.

All extraterrestrial bodies and the earth are like magnets, emit gravitational forces, and encompass potential when it comes to pulling other celestial bodies into their orbits. This is an acknowledged and undisputed physical law (Clifton, 2017). The moon's own gravitational pull

on the earth generates the ocean tides, which we observe and experience. This, too, is an established fact. Up to 60% of the human body is composed of water (McNeil-Masuka, & Boyer, 2023). This, too, is a biological truth. If the moon can facilitate terrestrial rhythms like the ocean tides, then wouldn't it also have some degree of control over the human body, and by association some of its neurophysiological and functional systems (i.e., higher-order consciousness, emotional valence, memory)? There is a positive correlation between general admissions to psychiatric units in hospitals and the full moon, apparently (Wang et al., 2020; Kazemi-Bajestani, Amirsadri, Samari., & Javanbakht, 2011; Templer, & Veleber, 1980). Further, if the moon can affect organic matter like the human body, which is literally stardust, then wouldn't it also be able to potentially exert some kind of influence over inanimate elements, like metals? This isn't magical thinking; it's the perspicacious application of inductive reasoning.

Unbeknown to many, a series of groundbreaking experiments investigating the planetmetal relationships were conducted by Frau Lily Kolisko (1889-1976), a student of the anthroposophist Rudolph Steiner (1861–1925). She developed a chromatographical method using filter papers to detect chemical changes that might be occurring in specific metal-salt solutions (i.e., silver nitrate, gold chloride) as the respective planetary bodies (i.e., moon, sun) were entering into conjunctions and oppositions with one another (Davidson, 1991). Then came the plethora of experiments. Under strictly controlled conditions in a laboratory-style setting, Kolisko was able to demonstrate that the images produced by silver-salt solutions exhibited a striking resemblance to the crater-ravaged surface of the moon, and that certain idiosyncratic patterns manifested on the filter papers at the inception of each lunar phase, particularly the full and new moons (Davidson, 1991).

Some of her most arresting work explored the connection between the sun and gold. To discern whether there was an esoteric correspondence between the two, she meticulously observed filter papers dipped in metallic-salt solutions of gold chloride before, during, and in the aftermath of a total eclipse. In the dark room, gold chloride typically manifested scarlet reds, bright yellows, royal purples, and other auric colors onto filter paper films. The solar eclipse of June 29, 1927, furnished some very unusual filter paper results; in place of the customary vibrant colors was an agglomeration of filthy reddish and purple-browns, as if an invisible hand had somehow reached out and smudged them over with a paintbrush before dotting them over with black specks (Davidson, 1991). At this time, the gold chloride had also lost its capacity to rise along the full length of the filter papers. Following the eclipse, the gold chloride contained in the filter paper films began producing vibrant colors again. The implications were, for all intents and purposes, sweeping and trailblazing-corporeal gold was somehow "programmed" to synchronize with, match, and reflect the state, condition, or behavior of the sun. The two were in harmonious attunement with one another. From the 1920s up until the 1960s, Kolisko investigated the effects of total solar eclipses on filter papers dipped in reagents of gold chloride and silver nitrate. She discovered that the filter paper films, usually a stonewashed violet color before the eclipse, turned a muddy black as the lunar disc passed over and shrouded the sun temporarily. As above, so below.



Gold chloride and Silver nitrate: 19<sup>th</sup> June 1936 during totality



Gold chloride and Silver nitrate: 18<sup>th</sup> June 1936. 5.52 a.m.

*Figure 3.* Two filterpaper pictures from an experiment by Kolisko, with the one below showing reactions of gold chloride and silver nitrate on 18<sup>th</sup> June, 1936, at 5.52am, the day before totality, and the one above showing their respective robust reaction during totality on 19<sup>th</sup> June, 1936. [photo]. From *Gold and the Sun: An Account of Experiments Conducted in Connection with the Total Eclipse of the Sun of 19th June,* 1936 by Lily Kolisko, 1936, London, UK: School of Spiritual Science and Its Applications in Art and Life. Copyright [2009] by Lily Kolisko.

Agnes Fyfe (1898-1986), a researcher from a cancer clinic at Arlesheim in Switzerland followed in Kolisko's footsteps. Fyfe initiated a temporary departure from the investigation of planet-metal relationships, deciding instead to focus on planet-plant correspondences. Her decision may have been informed, in part, by the conjecture that living matter like plant sap might react more robustly to celestial phenomena than metallic salts and, in part, by the realization that mercury bichloride, the substance she wanted to work with, was colorless and not very acquiescent to being tracked with the naked eye. Her research question pertained to conjunctions of the sun and Mercury, and whether these had any quantifiable effect on a reagent of diluted plant sap from mistletoe [which traditionally falls under the guardianship of the sun] and iris [which traditionally falls under the guardianship of Mars] (Fyfe, 1974). In the end, the decision to use plant sap was hasty and ill-advised because it introduced several confounds into the methodology and allowed her chief detractors, namely sycophants of the orthodox scientific community, to tactfully discredit her findings by attacking the study's internal validity.

In 1978, Fyfe turned her attention to the esoteric correspondence between Venus, the planet known to the ancients as the *Eosphoros* [Dawn-Bringer] and the *Hesperos* [Star of the Evening], and copper. She used Kolisko's filter-paper method to determine whether the planet's annual movements had any effect on 1% copper acetate solutions placed inside plant sap (Fyfe, 1986). Results indicated that metallic reactions were strongest when Venus was in celestial regions unobstructed by the sun. Equally astonishing were Kolisko's earlier experiments that tracked conjunctions of Venus and the sun using reagents of gold chloride and copper salt; a light-green precipitate would appear on the plastic filter-paper films each time Venus reached its zenith.

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Fyfe, in particular, was very astute and diligent in her observations, noting that reaction rates did in fact vary with seasonal rotation. Consistent with Kolisko's convictions, reaction strength was attenuated during the months of December and January [winter solstice] and exaggerated between the months of March and May [spring equinox] (Kollerstrom, 1993, p.15). Save for being the equinoctial marker for spring and the resurrection of Nature's generative powers, the spring equinox was frequently touted by alchemists as the most auspicious moment for the commencement of the Great Work. Astrologically speaking, it is a period wherein the sun rises in the constellation of Taurus and Venus is in an exalted state. The alchemical pursuit is in many ways the quintessential aesthetically feminine operation; the occult connections are plentiful.

Many of Kolisko's original experiments, especially those tracking the Mars–Saturn conjunction, were replicated in 1949 by Theodore Schwenck and in 1964 by Dr. Karl Voss of Hamburg (Kollerstrom, 1993, pp. 10-15). Analogous results to Kolisko's were furnished in both instances, and these were dutifully published in various astrology journals in an attempt to generate scientific interest in the study of astrochemistry and occult correspondences. Not surprisingly, the outcome was egregious. Instead of piquing curiosity and stimulating intellectual discourse, they were overlooked by the mainstream scientific community and swiftly faded into obscurity. In time, they were forgotten completely.

## Nomothetic Regression in Science

Recorded history is rife with examples of nomothetic regression in science. The Austrian physician and esoteric healer Franz Anton Mesmer, for instance, believed there was a nonphysical agent coursing through the human body that could be maneuvered, manipulated, redistributed, and titrated with magnets to induce homeostatic balance and healing. He called this intangible fluid "animal magnetism" (Ellenberger, 1970). In March, 1784, the Royal Inquiry spearheaded by American ambassador Benjamin Franklin rejected the notion that an intangible "magnetic fluid" existed and attributed any therapeutic properties of "animal magnetism" demonstrated by Mesmer to "imagination" (Ellenberger, 1970). By dismissing epiphenomena as products of the imagination, the appraisers inadvertently attributed to the latter powers which according to the Kantian-Cartesian, reductionist, post-enlightenment epistemological vat, it was not supposed to have. This subtle push against the materialistic tide gathered traction and has since collected shards of empirical evidence. For example, after developing a powerful radioactive technique to measure and map local variations in regional cerebral blood flow (rCBF) within the brain when individuals were engaged in discreet mental activities, the neurophysiologist David Ingvar (1924-2000) realized that both getting subjects to move their fingers voluntarily and getting them to visualize the movement produced the same resultactivation of the same supplementary motor area (Libet, 2009). Both imagining playing the piano and actually playing the piano builds cortical real estate in the motor homunculus (Davidson, 2012). Imagination becomes matter.

Of course, the existence of anomalous phenomena that continue violating the more conservative albeit dominant paradigm of eliminative materialism is not confined to the enduring counterculture of Western esotericism. In the early 1900s, Myers' musings on the workings of the mind-brain were rudely overlooked because they were a clump of progressive but inchoate ideas—premature in terms of historical context and well ahead of their time—which eluded scientific comprehension and could not be connected back to the canonical epistemology or knowledge base. In 1903, after his death, a progressive two-volume tome called *Human Personality* was published, challenging the conventional wisdom of the time (Kelly & Kelly, 2010). The book, for one, outlined a synoptic approach to the study of the human constitution and functioning, and it also broke new ground by staging a philosophical insurrection against materialist assumptions of reality which were monopolizing the intellectual climate. Myers outright rejected the more focused, limited, and constrained "computational" models of mind that were in vogue in the early 20<sup>th</sup> century, choosing instead to predicate his conjectures upon "filter" or "transmission" models where the brain is perceived as a transfer-and-storage device for the entire spectrum of human consciousness (Myers, 1904). Incoherent to many of his contemporaries, they were tacitly ignored and sunk back into the viscous soup of collective unconsciousness.

A parallel process may be identified in the turbulent history of clinical neurology. In 1888, for instance, the Swiss neurologist Louis Verrey described a bizarre visuoperceptual deficit in one of his stroke patients involving the loss of chromatic vision in one hemifield (Sacks, 2017). Today, we recognize this as cerebral achromatopsia [or hemi-achromatopsia in the case of Verrey's patient], an acquired loss in the ability to see, remember, or imagine colors (Andrewes, 2016, p. 48). The condition is usually brought on by a structural lesion or damage to a specialized area of the visual cortex known as V4. But in 1888 this kind of phenomenon would have been unprecedented and outright controversial for its failure to conform to a mechanical model of visual perception.

The dominant "isms" of the 1800s—atomism, reductionism, positivism—painted a very uninspiring picture of the human brain as a machine or computer and its innumerable functions as mechanistic, seamless processes (Losee, 2001). As an extension of that philosophy, the visual world detected by our retinas and processed in our visual cortices was an indivisible datum replete with form, color, depth, and kinesis. If the mechanisms underlying visual processing

mimicked those of a camera lucida, then there was a straightforward representation of the visual realm in the cortex; there had to be. Intellectually attractive and intuitive though in actual fact specious, this attitude became so deeply ingrained that any clinical evidence which didn't quite "fit" the puzzle was dismissed as a case of deliberate fabrication or inaccurate reporting. Now an illegitimate child, achromatopsia slowly receded from the clinical microscope; it became insensitive to the scrutiny of its finest practitioners and it gradually disappeared from the clinical literature.

Decades of quiescence passed. It wasn't until 1958 that David Hubel and Torsten Wiesel, two astute neurophysiologists, were able to demonstrate beyond a reasonable doubt that the specialized cells in the primary visual cortex (V1) were responding to horizontal and vertical contours with high light/dark contrast in the visual field, and not to concentric stimuli which was the case with retinal ganglion cells (Land, 2014). This suggested visual perception was an active, analytical, and modular process involving dynamic interaction between integrated neural subsystems. Each subsystem played a partial but distinct role in creating the gestalt of the visual image. The gestalt which appeared in conscious awareness was a harmonious confluence between sets of information gathered by neural modules attuned to different aspects of the visual world; as counterintuitive as it seemed, the brain actually builds the image from prime materials.

In the 1970s, Semir Zeki's studies of monkeys' cortices where he used micro-electrodes to record the activity of single cells churned up yet another vital piece of the puzzle: cortical neurons were responding to wavelength and color in roughly the same area identified as cortical real estate for chromatic vision by Louis Verrey in the late 1800s (Zeki, Watson, Lueck, Friston, Kennard, & Frackowiak, 1991). Zeki's "Eureka!" moment precipitated an abrupt conceptual shift in favor of functional specialization. Eventually, the age-old spell seducing everyone into believing that a seamless, absolute representation of the visual world existed in the cortex was broken.

The fluctuating intellectual climate was now ripe enough to accept cerebral achromatopsia as a legitimate neurological deficit, but it had required a whole lot of frenetic retrograde energy and some random laboratory accidents within a century-long slumber to get there. Regression, self-imposed forgetting, or a *scotoma* as Oliver Sacks calls it, is a ubiquitous phenomenon in scientific progress and not the prerogative of one scientific discipline. The heliocentric model of the solar system revived by Copernicus after its 1,400-year demotion at the behest of Ptolemy's geocentric version was, in fact, an ancient innovation; it was formulated and promulgated under the auspices of Aristarchus of Samos, an ancient Greek philosopher (Health, 2004). In another case, the geological theory of continental drift propounded by the German meteorologist Alfred Wegener in 1915 suffered a steep and transient decline in popularity before being resurrected with the birth of plate tectonics (Greene, 2015).

Similarly, under the tenuous twenty-first-century rulership of the orthodox Western mind sciences, mental phenomena like veridical past life memories, precognition, and clairvoyance are deemed anomalous because they contradict materialistic frames of reference. Scientists conditioned by eliminative materialism and trained in the use of scientific tools that are exponents of this deductive thinking process will excuse these "anomalies" as collective hallucinations, products of an overactive human imagination, or something else which is equally invalidating. For those more impermeable to the formidable powers of conditioning, the "anomalies" are untied threads at the mouth of a theoretical labyrinth beckoning us to retrace our steps and do some substantial renovations therein before coming back out again. Rearranging the inner furniture, the primitive simplifications and systemizations, requires a heightened awareness

of our own unconscious preconceptions, a relinquishing of the [sometimes flawed] conviction that one is right, a resistance to making premature valuations, and a resistance to becoming blindsighted by one philosophical frame of reference. None of these things are possible without humility and respect for the great mystery of life. Allowing one frame of reference to dominate the intellectual climate will inevitably breed dogma, and an ossified dogma is the real foe of scientific progress.

# Conclusion

For the contemporary scientific consensus, alchemy-a chemico-operative and spiritual discipline with philosophical and spiritual dimensions that first coalesced within the intellectual melting pot of Alexandria, Egypt-represents an inchoate forerunner of modern-day empiricism, specifically the discipline of chemistry, and has hitherto been confined to the dustbin of pseudoscience. For others, it is a syphon flushing them back to a pre-Enlightenment world that was at once holistic, animistic, and conceptually cohesive, a world which attempted to frame and understand phenomena in the context of the gestalt without reducing them to mutually exclusive singularities. Under the hegemony of this esoteric ontology, sympathetic-antipathetic relationships govern the universe, making permissible the idea of finite yet subtle correspondences between planets, animals, metals, and plants. Post-Enlightenment reductionism describes metals in purely quantitative and reductive terms, that being their atomic structure, while the older systems of knowledge underscore qualitative aspects like color, malleability, form, semblance, and attraction and affinity with constituents in other kingdoms to which they are perpetually yoked. Gold, for instance, was the incorruptible and immutable metal because it could withstand fiery dissolution; it was a subterranean equivalent of the splendid sun, while the latter was a permutation of the eternal spirit which saturates the heart (Abraham, 1998).

In light of the Steiner-Kolisko collaboration, one might be tempted to ask whether the post-Enlightenment gradual shift to a paradigm of eliminative materialism led to a rejection and suppression of ideas like esoteric correspondences and transmutation, viable hypotheses that could, in fact, be subjected to tightly controlled empirical investigations with potential reproducibility of any statistically significant findings. Unencumbered by implicit bias and lifelong conditioning, the dispassionate scientist must approach such anomalous phenomena with an inquisitive eagle eye and dare to ask, "Why is there a quantifiable, recordable change in the chemical behavior of two metals [mixed in a dish as a metal salt reagent with a cylindrical filter paper insertion to capture characteristic forms of the reaction] during a conjunction or opposition of the planets traditionally associated with them? Why does the chemical activity change within this microscopic theatre as the celestial phenomenon unravels?"

What of metallic transmutation? While the idea of transforming one metal like copper into another metal like gold captures the collective imagination, it violates nomothetic laws as outlined by physical sciences like physics and chemistry. Transmutation of copper to gold would necessitate a change at the atomic level, that being actively manipulating a chemical element with 35 neutrons, 29 protons, and 29 electrons as to create a monoisotopic element with 79 protons, 79 electrons, and 118 neutrons–a goal which could only be achieved [theoretically] by a paroxysmal chemical reaction occurring in an atom smasher or particle accelerator (Matson, 2014). These voluminously violent vortex-creating conditions and the specialized knowledge in mechanical engineering needed to impel them fall way outside the intellectual scope of the pre-Enlightenment mind and are a far cry from the delicate refinement techniques used by alchemists of this time in their laboratories. Hence, this was not a viable mechanism of transmutational action, but there is a possibility, however minute, that these practitioners understood something about the intricacies of mind-matter interaction that has since been lost to us.

Recorded history is rife with proverbial cases of throwing the baby out with the bathwater-the concept of the imagination, cerebral achromatopsia, the heliocentric model of the universe, and continental drift, to name a few. They were phenomenal oddities most discordant with the prevailing philosophical climate. All were unprecedented and initially celebrated "Eureka!" moments; all were discredited, ostracized, and forgotten; and all underwent renaissance and reintegration with the dominant assumptive worldview when the philosophical status quo shifted in their favor. Perhaps the same will be true for the doctrine of esoteric correspondences and transmutation. If the inquiring, undaunted mind did not point to those single-celled organism that resembles balls, spirals, or rods under a microscope and ask, "What then is this?" we would not have that life-saving antidote called penicillin now. There very well may be a gold nugget–a panacea even–awaiting the valiant researcher willing to meander into that pre-Enlightenment world and begin parsing out the nature of these correspondences.

## References

Abraham, L. (1998). A dictionary of alchemical imagery. Cambridge, UK: Cambridge University Press.

Andrewes, D. (2016). *Neuropsychology: From theory to practice* (second ed.). New York, NY: Routledge.

Atwood, M. A. (2012). *A suggestive inquiry into the hermetic mystery* (Classic Reprint). Central, Hong Kong: Forgotten Books.

Burckhardt, T. (1986). *Alchemy: Science of the cosmos, science of the soul*. Shaftesbury: Element Books.

Clifton, T. (2017). Gravity: A very short introduction. Oxford, UK: Oxford University Press.

Davidson, A. (1991). *Metal power: The soul life of the planets*. Garberville, CA: Borderland Sciences Research Foundation.

Davidson, R. J. (2012). *The emotional life of your brain: How Its unique patterns affect the way you think, feel, and live--and how you can change them.* Dublin, USA: Penguin.

Ellenberger, H. F. (1970). *The discovery of the unconscious: The history and evolution of dynamic psychiatry*. New York, US: Basic Books.

Fyfe, A. (1974). The signature of the planet Mercury in plants. *Br Homeopath J* 1974; 63(02): 111-124.

https://dx.doi.org/10.1016/S0007-0785(74)80037-2

Fyfe, A. (1986). *Die signatur der Venus im pflanzenbereich: Kapillar-dynamische untersuchungsergebnisse III.* Stuttgart, GER: Verlag Freies Geistesleben.

Greene, M. T. (2015). *Alfred Wegener: Science, exploration, and the theory of continental drift*. JHU Press.

Haage, B. D. (2006). Alchemy II: antiquity–12<sup>th</sup> century. In W. J. Hanegraaff, A. Faivre, R. van der Broek and others, 2 vols (Eds.), *Dictionary of gnosis and Western esotericism* (pp. 16-32). Leiden, Netherlands: Brill.

https://dx..doi.org/sanmarcoslodge342.org/wp-content/uploads/2019/02/Dictionary-of-Gnosisand-Western-Esotericism.pdf

Heath, T. (2004). Aristarchus of Samos: the ancient Copernicus. Courier Corporation.

Humburg, B. (2011). On the colour changes in the great work or the alchemical transformation of matter. *Hermetic Journal*, 6:3.

# https://dx.doi.org/www.alchemywebsite.com/humburg.html

Kazemi-Bajestani, S. M., Amirsadri, A., Samari, S. A., & Javanbakht, A. (2011). Lunar phase cycle and psychiatric hospital emergency visits, inpatient admissions and aggressive behavior. *Asian journal of psychiatry*, *4*(1), 45–50. <u>https://doi.org/10.1016/j.ajp.2010.12.002</u>

Katz, D. A. (1978). An Illustrated history of alchemy and early chemistry.

http://dx.doi.org.www.chymist.com/History%20Alchemy.pdf

Kelly, E. F., & Kelly, E. W. (2010). *Irreducible mind: toward a psychology for the 21st century* (First paperback edition.). Rowman & Littlefield.

Kiritsis, P. (2024). The riddle of alchemy. London, UK: Mantra Books.

Kolisko, L. (1936). *Gold and the Sun: An account of experiments conducted in connection with the total eclipse of the Sun of 19th June, 1936.* London, UK: School of Spiritual Science and Its Applications in Art and Life.

Kollerstrom, N. (1993). *The metal-planet relationship: A study of celestial influence*. Garberville, CA: Borderland Sciences Research Foundation.

Kollerstrom, N. (1993). Developing the Kolisko approach. *Borderlands: The Crossroads of Science and Spirit*, XLIX (1), 10-15.

Land, M. F. (2014). *The eye: a very short introduction*. Oxford, UK: Oxford University Press. Libet, B. (2009). *Mind time: The temporal factor in consciousness*. Cambridge, MA: Harvard University Press.

Losee, J. (2001). *A historical introduction to the philosophy of science* (4<sup>th</sup> edition.). Oxford, UK: Oxford University Press.

Matson, J. (2014). Fact or fiction? Lead can be turned into gold—Particle accelerators make possible the ancient alchemist's dream—But at a steep cost. *Scientific American, January, 31*. McNeil-Masuka, J., & Boyer, T. J. (2023). Insensible fluid loss. In *StatPearls*. StatPearls Publishing.

Maillard, C. (2006). Carl Gustav Jung. In W. J. Hanegraaff, A. Faivre, R. van der Broek and others, 2 vols (Eds.), *Dictionary of gnosis and Western esotericism* (pp. 648-53). Leiden, Netherlands: Brill.

https://dx..doi.org/sanmarcoslodge342.org/wp-content/uploads/2019/02/Dictionary-of-Gnosisand-Western-Esotericism.pdf

Myers, F. W. H. (1904). *Human personality and its survival of bodily death* (Vol. 2). Longmans, Green, and Company.

Sacks, O. (2017). The river of consciousness. London, UK: Picador.

Templer, D. I., & Veleber, D. M. (1980). The moon and madness: a comprehensive perspective. *Journal of clinical psychology*, *36*(4), 865–868.

https://doi.org/10.1002/1097-4679(198010)36:4<865::aid-jclp2270360405>3.0.co;2-8

Thompson, C. J. S. (1990). The lure and romance of alchemy. London, UK: Random House.

Versluis, A. (1988). The philosophy of magic. London: Penguin Books.

Wang, R. R., Hao, Y., Guo, H., Wang, M. Q., Han, L., Zheng, R. Y., He, J., & Wang, Z. R.

(2020). Lunar cycle and psychiatric hospital admissions for schizophrenia: New findings from Henan province, China. *Chronobiology international*, *37*(3), 438–449.

https://doi.org/10.1080/07420528.2019.1625054

Zeki, S., Watson, J. D., Lueck, C. J., Friston, K. J., Kennard, C., & Frackowiak, R. S. (1991). A direct demonstration of functional specialization in human visual cortex. *The Journal of neuroscience: The official journal of the Society for Neuroscience*, *11*(3), 641–649.

https://doi.org/10.1523/JNEUROSCI.11-03-00641.1991