

## Love as Gravitational Attraction in Percy Shelley's *Prometheus*

### *Unbound*

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"Love [...] is that powerful attraction towards all we conceive, or fear, or hope beyond ourselves [...] This is the bond and the sanction which connects not only man with man, but with every thing which exists." (Percy Shelley, "On Love")

"It is indeed a double source of interest in this science, that whilst it is connected with the grand operations of nature, it is likewise subservient to the [...] most refined arts of life. New laws cannot be discovered in it, without increasing our admiration of the beauty and order of the system of the universe" (Humphry Davy, *Elements of Chemical Philosophy*, 58-59)

In 1821, Percy Shelley wrote a miscellaneous fragment that he intended to serve as commentary for his *Defence of Poetry* before his untimely death: "in the same manner as *gravitation* is the passive expression of the reciprocal tendency of heavy bodies toward their respective centres, [...] [there is an] [a]ssociation [that] bears the same relation to imagination as a mode to a source of action" (Sha 75-6). Shelley's fragment clarifies his belief that like gravitational force, human imagination influences action in the external world. Following Shelley's argument that heavy bodies move toward their gravitational centre in much the same way that "imagination" moves towards "action," this article explores Shelley's association of the physical world (i.e., heavy bodies) with the internal world of imagination, and examines how romantic love functions as a scientific force "akin to gravity and magnetism" in Shelley's *Prometheus Unbound* (Sha, *Imagination and Science*, 36). In *Prometheus Unbound* (1819), the titular character Prometheus frees himself from chains, assumes the powers of a higher-dimensional entity, and transforms earth into a utopia through his intense feelings of love for the goddess, Asia. By using romantic love as the catalyst for granting Prometheus' freedom and widespread utopic happiness in *Prometheus Unbound*, Shelley is able to write a lyrical drama in which the intensity of romantic love functions as a scientific force of nature (Gilmore 473).

While much of the scholarship on Shelley's *Prometheus Unbound* looks at science and love separately, Sharon Ruston and Richard Isomaki provide science-and-love combination readings that serve as a springboard for this article. Ruston's *Shelley and Vitality* discusses the ways in which the Romantic era science of vitalism (electricity, light, fire) relates to love/sex and revolution; specifically, her third chapter, "The Political Body: *Prometheus Unbound*," discusses how, in "Asia, Shelley synthesizes light, electricity and love and these are analogous with vitality" (117). Isomaki's article focuses more on gravitation: "Love as Cause in *Prometheus Unbound*"<sup>1</sup> puts forth the idea of love as "a reciprocal causal force": the "reciprocal tendency of a body toward another center expresses the cause of gravitation, an unknown Power; this tendency corresponds to that which a person experiences as love which itself expresses the inexplicable cause of a thirst for communion" (665). Such

“thirst for communion” tracks with Shelley’s personal philosophies as well as Prometheus’ situation in the beginning of the play.

This article begins with the premise that Shelley used romantic love as a gravitational force that altered physical reality in *Prometheus Unbound* - specifically looking at Romantic *Naturphilosophie* concepts of attraction and repulsion that result in various forms of matter, including al-chemical transformations in both mind (mental) and matter (physical). With relevant background on Romantic era science, the relation between chemical and alchemical philosophies establishes the argument for reading Prometheus’ love for Asia as a force of gravitational attraction that creates reality anew. For Shelley, love is transcendent (Ideal) and gravitational (real), because the inherent non-locality of the transcendent allows for the forces of attraction and repulsion which combine to form matter. Taking a note from *Naturphilosophie*, if one (say, a mythological hero) wants to effect change on a massive scale, Romantic natural philosophy demands gravitational attraction, which, in itself requires a multiscale structure; i.e., an everyday world of appearance and materiality as well as a transcendent Idealism of concepts that exist only as potential, so that the actual may continue to emerge in new (hopefully improved) iterations.

Shelley’s *Prometheus Unbound* is built upon a framework that bridges such dualistic thinking that otherwise separates the Ideal and the real, subjective and objective, unknown and known, and utilizes *Naturphilosophie* concepts<sup>2</sup> to expand our understanding of the deep interconnectedness between mind and matter. When we combine these apparent opposites, we have a philosophical superorganism in which love can affect massive system changes vis-à-vis an *ekstatic*, multiscale system and those emotions, likewise, become imbued with more weight (hence, reading gravity as physical and metaphorical). In Martin Heidegger’s ontico-ontological “ecstatic horizontal unity of temporality,” the transcendent frame, or referent, is essential for the everyday to exist at all, but, as I have argued elsewhere, the everyday is also able to affect changes in the transcendent horizon (Cuthbertson). Hugh Roberts wrangles with this issue when he writes that critics’ “‘nontranscendental’ version of Shelley [...] sees him as an insistently skeptical subverter of all stable signification, metaphorically ‘transforming’ and ‘transferring’ meaning so as to undermine any claims to eternally valid ‘truths’” (156). I seek to contribute the idea that such eternally valid truths always-already include everyday alchemical permutations.<sup>3</sup>

To set up my arguments, I will give a brief overview of Romantic era science as relevant to this article, as well as the impact of medieval philosophies of science and love on Shelley. In my first major section, I examine how romantic love functions as an *ekstatic*, non-local entanglement through which the drama’s characters utilize a multiscale existence to shift their earthly reality to the higher-dimensional paradise. In section two, I discuss the concept of individual perception in Romantic philosophy and science, exploring further the power of thought and language to transform the lovers’ experience of reality. Thereafter I explore how Romantic era scientists believed that electromagnetism comprised everything from individual consciousness to physical matter, essentially granting Prometheus and Asia the possibility to alter their physical realities through their mental and emotional states of mind. In conclusion, I summarize how the *Naturphilosophie* concepts of attraction and repulsion create all matter and connect the earthly to a higher-dimensional paradise owing to individual perception that alchemizes free will and individual desire into experiential materiality.

### Romantic Science and the Impact of Medievalism

Before delving into close readings of *Prometheus Unbound*, it is necessary to flesh out a few Romantic concepts regarding eighteenth-century science (i.e., natural philosophy and German *Naturphilosophie*) that this article builds upon. In *A System of Familiar Philosophy in Twelve Lectures* (1802), Adam Walker explained that “the grand basis of chemistry is attraction and repulsion. By attraction, I mean not only that of cohesion and gravitation [...] but [also] the affinities of matter; the elective attractions, or local affections of it, that is, the tendency which the constituent parts of bodies have to unite readily with some substances, in preference, as it were to other parts of matter” (153-154). In addition to Walker’s explanation of chemistry in terms of attraction and gravitation, Humphry Davy defines chemistry, or Chemical Philosophy, in his *Elements of Chemical Philosophy* as “the substances belonging to our globe are constantly undergoing alterations in sensible qualities, and one variety of matter becomes as it were transmuted into another. Such changes [...] are called chemical” (1). As Trevor Levere and Mi Gyung Kim explain, the “causes of chemical combination [...] concerning change, substance, motion, and the elements” of everyday reality have a profound impact “[w]hen affinity” is “strong” since “the principles of these substances disappeared in forming a new combination” (Levere 2; Kim 414). Essentially, “[m]atter is the product of [attractive and repulsive] forces,” and “the synthesis of both of these, manifesting” is “gravity” (Schelling 32). Schelling’s explanation of how various elements of attraction and repulsion work together to form physical matter through gravity underscores the philosophy that gravitational attraction forms the physical world of four-dimensional (4-D) reality as much as the higher-dimensional, paradisiacal reality that Prometheus and Asia inhabit by Act 3.

While eighteenth-century natural philosophy had evolved away from the metaphysical science of the Middle Ages, Romantic era science was still heavily influenced by the beliefs of medieval Europe. For example, Humphry Davy’s *Elements of Chemical Philosophy* (1812) explains that “early chemical discoveries led to the pursuit of [medieval] alchemy,” which attracted labourers drawn by “prospects so brilliant and magnificent” that “offered to them [...] the means [...] of forming a paradise on earth” (11). Barbara Estermann, Ted Underwood, and Richard Sha, among others, detail the ways in which eighteenth-century chemical philosophy influences Shelley’s poetry to such an extent that his work shows a “fusion of elements ‘kindled’ into inspired transformation on the physical, spiritual, and socio-political planes” (Estermann 414).<sup>4</sup>

The poetry and science of the Middle Ages influenced Shelley’s writing to such a high degree that alchemical transformation functions as a plot device in his poetic works and his scientific theories. As a literary example, the paradise that Shelley presents in *Prometheus Unbound* - accessible only through Prometheus’ love for Asia - recalls the medieval courtly love tradition that espoused romantic love as a means to achieve personal and metaphysical growth. Furthermore, Shelley’s conviction that “the forces of attraction and repulsion that hold matter together are love” is a mirror of Dante’s conclusion in *Paradiso* that “my desire and will were moved already -like a wheel revolving uniformly - by the Love that moves the sun and the other stars” (Sha, *Imagination and Science*, 7; *Paradiso*, XXXIII. 142-145). Thus, echoing Dante’s poetry, Prometheus’ love for Asia functions as a magnetic force between his “elective attractions,” i.e., gravitational attraction, that frees him, enabling him to be with Asia (Walker 154). As Ted Underwood denotes, “poetry for Shelley [...] is a transmuting power,” poetic<sup>5</sup> language, thought, and feeling acts as a gravity that affects the emotions in such a way that results in action (318).

### Non-Local Entanglement and Love

For Shelley, gravitational attraction and repulsion enables poetic productivity in which the affinity of some bodies to combine and cohere enables the Shelleyan poet to embody a living work of art while creating works of art (Estermann 420). This ability to be both artist and artwork (the subject-work) reflects Shelley's philosophy of the poet as a person who lives poetically (Lacoue-Labarthe 49). Lacoue-Labarthe and Nancy's idea of the Romantic subject-work dualism parallels Shelley's use of romantic love as a transformative force from mind to matter. Love - one of Shelley's major poetic themes in *Prometheus* - exemplifies non-local and entangled action at a distance through the Love that transformed into Eternity and in the atmosphere through the "impalpable thin air/And the all-circling sunlight [that] were transformed" in the vibrational alchemy of love that "folded itself round the sphered world" (III.IV.100-101, 102-103). While Shelley could not have known that stronger gravitational fields slow down an individual's experience of time (Albert Einstein's special relativity theory was not published until 1905), he was able to intuit the influence of heightened emotional states on an individual's perception of everyday experience. Adam Walker, Romantic era scientist and Shelley's teacher, wrote about an element of selection or choice in the gravitational "power, by which the atoms of matter draw together, cohere, and maintain distinct forms" with other "distinct forms" (154, 75). Relationality, affinity, and organicism bring Romantic literature and scientific theory together into a cohesive unity under the gluey aegis of, for Shelley, Love.

Shelley's understanding of gravity was not reducible to a Newtonian concept of an object falling in a perpendicular line from an external gravitational force, but, rather, he viewed mind and matter as deeply intertwined, with gravity as the effect of the body's internal composition that determines its intensity and attraction, i.e., its "cohesion and gravitation" (153). In Act II of *Prometheus Unbound*, when Asia and Panthea are descending into Demogorgon's cave, The Song of Spirits repeats the word down eighteen times in a single stanza; this down is not a mere direction, but, moreover, a description of momentum, specifically, a gravitational force that carries the sisters "[t]hrough the veil and the bar/Of things that seem and are" (II.III.59-60). Likewise, since the Song of Spirits explains that a "sound whirls around" (II.III.63) Asia and Panthea during their journey, the Song of Spirits reflects the Romantic era science of Hans Christian Ørsted who claimed that "[t]he centre of force does not act attractively or repulsively on the magnetic poles, but it drives the poles in a circle around it" (qtd in Snelders 237). In fact, as H.A.M Snelders argued, for Ørsted, "this whirling was a new action of force" capable of generating new forms (see autocatalysis, speciation, emergence) from the force of attraction (237).

Asia and Panthea's descent into Demogorgon's cave aligns with German Romantic *Naturphilosophie* in which the major forces of the universe were inextricably interconnected. For Shelley, the sense-making role of perception and the law of association combine to form a deep interconnectedness, which he describes as "the generative principle of each animal and plant, a power which converts the substances by which it is surrounded into a substance homogeneous with itself. That is, the relations between certain elementary particles of matter undergo a change" ("On a Future State"). Romantic era science portrays an ecological understanding of the universe in which the matter among all things is connected through a series of relations (such as we see in the contemporary quantum physics concepts of wave dynamics and non-local entanglement). Shelley's use of the generative principle within a larger psychosocial ecology enables him to make the mind material and the material mere



mind. As Richard Sha explains: "matter is beholden to the law of gravitational force and thus also bound by love. [...] In the same way that matter needs gravity Shelley argues that the imagination is bound by the law of association, which recognizes reciprocal attractions between distinct entities" (*Imagination and Science* 76). The deep interconnectedness between mind and matter through the law of association (not to mention *Naturphilosophie* electric fluid) further highlights how Shelley was able to think the relation between thought and reality as a lamp rather than a mirror (Abrams).

True to Shelley's vitalist leanings, in Act 1, Prometheus' memories of Asia are not merely reflections of his past experiences but, rather, the creative production (poiesis) within an interactive dynamic of cosmic forces that "kindled within him a thirst which outran/Those perishing waters; a thirst of fierce fever/Hope, love, doubt, desire" (I.543-545). To be kindled in this context refers as much to an emotional amalgamation as to "a chemical catalyst" (Estermann 420). Prometheus and Asia are entangled through the "interaction between forces" within a large-scale ecosystem encompassing both mind and matter (thought-forms and physical-forms) (Sha, *Imagination and Science*, 85); their interaction (or desire for interaction) is intensified through the distance between them that makes affinity possible. The reciprocated desire that Prometheus and Asia feel for one another leading up to their reunion exemplifies Humphry Davy's theory that while "most of these attractions must be exerted at sensible distances, [...] for anything we know the contrary, gravitation and cohesion may be mere modifications of the same general principle of attraction" (*Elements of Chemical Philosophy* 69).

Prometheus' metaphorical gravity (the weight of his love for Asia) is not, as Harold Bloom contended, merely a dissolving of the self into the beloved, but rather a temporary destabilization of the self that results in personal growth and emergence of new forms (see emergence theory): "the creative Eros of the Romantics is not [self-] renunciatory though it is self-transcendent" (13). Prometheus' experience of love is ecstatic (*ekstatic* or ex-static) – he stands out of himself insofar as his thoughts are focused on Asia (outside of himself) – and such *ekstatic* love is the condition for the generation of new forms to emerge (see emergence theory). Shelley links *ekstasis* with both romantic love and morality in his *Defence of Poetry* when he writes: "The great secret of morals is love; or a going out of our own nature, and an identification of ourselves with the beautiful which exists in thought, action, or person, not our own. A man, to be greatly good, must imagine intensely and comprehensively; he must put himself in the place of another and of many others; the pains and pleasures of his species must become his own." The implications of such *ekstatic* (ex-static) emergence in *Prometheus* is exemplified in the fierce love between Shelley's lovers that transforms their reality into a utopia (I.544).

Asia's emotional gravity is a force of magnetism insofar as she trusts her instincts to reach "Happy heaven," which, in Shelley's Promethean universe, is the force of love itself. Asia's declaration that her "soul is an enchanted boat [of 'desire'] [...] catching the winds that fan happy heaven," in which she can "sail on, away, afar,/Without a course, without a star,/But by the instinct of sweet music driven" correlates gravitational pull with personal desire (II.V.72, 87, 88-90). Panthea beautifully illuminates the transformative power that emotion has in everyday life when she explains that:

love, like the atmosphere  
 Of the sun's fire filling the living world,  
 Burst from thee [Asia], and illumined the earth and heaven  
 And the deep ocean and the sunless caves  
 And all that dwells within them. (II.V.26-31).

Asia's ability to reach that "paradise of vaulted bowers" is partly due to the atomistic interconnectedness in and around Asia through "the strings of the waved air/Aeolian modulations" (III.IV.186-188). The love that exists within Asia is extant non-locally in other areas of the universe, and the action at a distance of this vibration of love ignites the "moment of vision" (Heideggerian *Augenblick*) in which Asia's ownmost potentiality self-reflexively calls her toward ultimate self-transformation. Arkady Plotnitsky's work on how "quantum physics relates to the observable effects of the interactions between unobservable entities [...] and ultimately *inconceivable* material entities" further highlights Asia's transformation as parallel to what is observable and unobservable/inconceivable in our own lives, to what is known and unknown, to science and to love (21). The multiscale function of Asia's emotional state, like quantum entanglement/non-locality, enabled her to enfold her love for Prometheus back on herself.<sup>6</sup> Likewise, Prometheus and Asia's engagement in (*ekstatic*) ecstatic experiences allows them access to a higher-dimensional vibration ("paradise of vaulted bowers") through which they transform four-dimensional reality.

Another way to consider how love functions as a gravitational force in *Prometheus Unbound* is the Romantic interest in loadstones, which "have magnetic force" that mirrors emotional gravitas since, as Denise Gigante states, "human beings have its [loadstones'] soulish version, intention or will. Both are extensions of the same power that is capable of bringing about a thing's identity" (182). The role that gravity plays in Shelley's understanding of poesis (creative production) has as much to do with transforming personal identity as with transforming a person's experience of everyday life. The poetic subject participates in creating their identity by engaging in mindful communication, including communicating with themselves about the self in their immediate environment. Likewise, Prometheus' love for Asia is the reason why he is "completely fit to be freed" from his chains (literally and metaphorically) (King-Hele 179). The worldview that Shelley presents in *Prometheus* is *ekstatic* as an ex-stasis ("standing outside of") and as ecstatic (as an elation). The *ekstatic* structure of love that Shelley creates in *Prometheus* enables Prometheus and Asia to overcome their circumstances and live poetically. By acknowledging their romantic love, the lovers access the alchemical power of transformation and transcendence in their vibrational bodies, which are non-local and composed of the forces of attraction and repulsion.

Prometheus and Asia's love for each other not only grants their freedom, but also freedom for the rest of the world from the ravages of time. This intersection of romantic love, personal freedom, and relative time echoes the Romantic philosophy that "everything interacted with everything else" through interpenetrating wave patterns of matter between the external phenomenal world and the internal human psyche (Sha, *Imagination and Science in Romanticism*, 31). Prometheus' love freed him of his chains because love exists as a non-local force entangled like the Romantic gravitational attraction that requires distance in order to affect action. The relational, *ekstatic* framework for the mythic universe that Shelley creates in *Prometheus* mirrors his arguments in the *Defence of Poetry* that espouses a poetic subject who "beholds intensely the present as it is, and discovers those laws according to which present things ought to be ordered, but beholds the future in the present [...]. A poet participates in the

eternal, the infinite, and the one; as far as relates to his conceptions, time and place and number are not" (512). Shelley's avant-garde poetics and *ekstatic* philosophy of science enables his protagonists in *Prometheus* to create a paradise founded on "fierce [...] love" (I.544-545). Prometheus' longing for Asia during Act 1, in which he remembers "drinking life from her loved eyes" (I.123), stands as an example of Shelley's philosophic beliefs that "until the mind can love, and admire, and trust, and hope, and endure, reasoned principles of moral conduct are seeds cast upon the highway of life which the unconscious passenger tramples into dust" ("Preface" 209).

Shelley posits that no total dissolution of the self can occur because of the primacy of the individual in Romantic philosophy through which the individual consciousness remains active within the larger collective. This *ekstatic* way of engaging in "fierce [...] love" reflects the interconnectedness between consciousness, light, electricity, magnetism, and matter in Romantic era science. In terms of individual consciousness, Philippe Lacoue-Labarthe and Jean-Luc Nancy state that mediation and nonidentity allow individuals to engage in self-reflexive thought processes, for "truth cannot be attained by the solitary path [...] but [requires] rather that of exchange, mixing, friendship—and love" (46). This mediation of nonidentity culminates in personal growth because identity is shaped by each individual's experiences of the external world (as much as the external world is mediated by individual bias); therefore, mindfulness practices such as nonidentity connect the individual with their potential for other ways of living that may not reflect their past experiences.

The Romantic focus on interconnectedness between the poetic imagination and the environment highlights where gravitational attraction and the generative principle converge in *Prometheus* is in affect's ability to effect: that is, a poet's desire for a transcendental experience must equal their desire for internal transformation. Indeed, Romantic literature's focus on the "*everyday and local*" is where, according to Alicia Carroll, "men [...] best transform their consciousness," and where mind and matter connect in such a way that results in massive system changes (218). Prometheus' "[t]hree thousand years of sleep-unsheltered hours [...] torture and solitude, Scorn and despair his " empire" (I.12-15) are "[m]ore glorious far than that which surveyest" (I.16), because, in his words, "misery made me wise" (I.58). In this Wordsworthian style reflection, Prometheus exemplifies how the "local" environment comprises both the physical and psychical through which internal transformation translates into changes to daily life. Prometheus' views toward internal transformation through local engagement are primarily Humanistic: "I am king over myself, and rule/The torturing and conflicting throngs within" (I.493-494), and likewise, "[e]vil minds/Change good to their own nature" (I.380-381). Prometheus overcomes his emotional and physical pain through sheer will-power, which, as the Chorus clarifies, is "kindled" through "fierce [...] [h]ope, love, doubt, desire" (I.544-545).

Analogous to his philosophy of the poet in the *Defence of Poetry*, Shelley's rendering of Love within *Prometheus* contains many examples of non-local entanglement: in Act 1, the First Spirit says that "One sound beneath, around, above,/was moving; 'twas the soul of love"; in Act 2, Panthea poignantly explains that "love" fills "the living world;" and in Act 4, "Love, from its awful throne of patient power/In the wise heart [...] folds over the world its healing wings." Richard Sha's point that, for Shelley, "the activity of forces in the universe, the force of attraction, is love, and love is electrical," illuminates Shelley's use of love as a conduit of poesis (*Imagination and Science*). Love's ability to transcend a unilateral direction or point in space (e.g. beneath, around, above) suggests that love exists at a higher-dimensional membrane in space-time. While Shelley predated Einstein by nearly one hundred years,

Shelley intuited what contemporary physicists refer to as a hypersphere, comprised of varying dimensions of space-time (e.g., 3-D, 4-D, 5-D). The paradise of the Promethean Age, heralded by Prometheus and Asia's reunion, is "peopled by shapes too bright to see"; likewise, in Act 2, Asia says that her soul is going to "Realms where the air we breathe is love," realms that are "[h]armonizing this earth with what we feel above" (III.I.95, 97). A self-proclaimed Atheist, Shelley is not referring to the Christian paradise of Heaven as a realm above earth - his romantic hypersphere is accessed through each individual's own nature, not through God's will; this humanistic paradise, to appropriate Asia's metaphor, is reached via a boat that the individual "desire [...] guide[s]."

### Perception and Shelley's Philosophy of Language

Individual perception is a major theme in Romantic era philosophy, literature, and science, from Samuel Taylor Coleridge's *Biographia Literaria* to Humphry Davy's scientific treatises that argue "the laws of gravitation, as well as the chemical laws, [should] be considered subservient to one grand end, PERCEPTION" ("An Essay on Heat, Light, and the Combinations of Light" 85). Likewise, the Romantic symbol for poetic creation is the aeolian harp, a musical instrument that synthesizes sensory impressions from the external world vis-à-vis human consciousness. This synthesis of physical phenomena and consciousness reflects Shelley's philosophy that "[e]very man's mind [...] is modified by all the objects of nature and art" and is "the mirror upon which all forms are reflected, and in which they compose" ("Preface" 208). In Act 2, Semichorus I explains that "soft [sensitive] emotion/Attracts, impels them [i.e., "All spirits"]," and "[t]here streams a plume-uplifting [Aeolian] wind/Which drives them on their path" (II.II.50-51, 53-54). Asia's romanticism is tethered to reality, motivated by a love disseminated from above - this bi-perception enabled Asia to attract a different reality from that of Act 1 (II.I52-53). Moreover, the Spirit of the Hour describes the transformation of earthly reality into a paradise with the phrase "[m]y vision [...] grew clear and I could see/Into the mysteries of the universe" due to the "impalpable thin air" and "all-circling sunlight [...] As if the sense of love dissolved in them/Had folded itself round the sphered world" (III.IV.100-105).

Shelley's interest in the sense of sight as a means of second-sight (or prophecy) - a way of seeing that which is beyond comprehension<sup>7</sup> - is highlighted when Panthea declares herself at a loss of visual understanding when Asia begins her alchemical ascension through love:

How thou art changed! I dare not look on thee;  
I feel but see thee not. I scarce endure  
The radiance of thy beauty. Some good change  
Is working in the elements, which suffer  
Thy presence thus unveiled. (II.V.16-20).

In this passage -"I feel but see thee not" and "Some good change/Is working in the elements" - Shelley espouses that the higher-dimensional hypersphere of the Promethean Age exists at a higher vibrational frequency than entities (such as Panthea) at lower (4-D) dimensions can perceive. Asia embodies what Humphry Davy refers to as a "double affinity, or complex chemical attraction" when "one body is capable of separating others, from certain of their combinations; and in consequence of their same circumstance, mutual decompositions of different compounds take place" (*Elements of Chemical Philosophy* 103). One mode of perception is exchanged for another mode of



perception, exemplified in the contrast between Panthea and Asia after the latter's electrical transformation. Likewise, Shelley wrote in "*Defence of Poetry*" that sensory perception can be used to free the mind from its "film of familiarity which obscures us from the wonder of our being": "All things exist as they are perceived; at least in relation to the percipient. [...] But poetry [...] purges from our inward sight the film of familiarity which obscures from us the wonder of our being. [...] It creates anew the universe, after it has been annihilated in our minds by the recurrence of impressions blunted by reiteration" (533). Shelley's philosophy is written into his *Promethean* story in which seeing poetically, as an active ecstasis, or poiesis, enables Prometheus and Asia to form a new reality, but only through a sense of poetry, of wonderment, of being in love.

While Shelley believed that the "[m]ind [...] cannot create, it can only perceive," he considered perception to be an active ("vital" or poietic) process defined by "expressing a certain state of the human mind with regard to the manner in which two thoughts are apprehended to be related to each other" ("On Life," 509). This poetic apprehension parallels the Romantic principle of attraction in which the "affinity of some bodies to draw together and combine" indirectly engages in the emergent process of poiesis (Estermann 4). Gravitational attraction is as much romantic as hermeneutic in *Prometheus Unbound* where love is a force of existential alchemy insofar as it is expressed as such. In the *Defence*, Shelley described language as "vitally metaphorical"<sup>8</sup>; that is, it marks the before unapprehended relations of things and perpetuates their apprehension, until the words which represent them, become, through time, signs for portions or classes of thoughts instead of pictures of integral thoughts" (512). For Shelley, as Timothy Morton explained, the word poet "means the very capacity of sentient beings to synthesize sense impressions and ideas," rather than merely writing poetry (187).

Shelley's philosophy of language parallels what Lacoue-Labarthe and Nancy refer to as an "internal 'formative force'" that determines Romantic poiesis as a production (49). Shelley's use of the word poiein in the *Defence* also aligns his poetics with production, a combination made possible through the multi-dimensional scale between the poet's inner life and external environment. Prometheus and Asia's paradise takes into account the needs of the inhabitants of the Earth, which is demonstrated, among many moments in the drama, when the Chorus exclaims in Act 1: "As one voice, Truth, Liberty, and Love!" Moreover, *Prometheus* concludes with a personified form of Love who "folds over the world [with] its healing wings." The unapprehended objects of thought that Shelley claims a poet - or poetic living - can reveal is inextricably linked to an experience of "astonishment which would [...] absorb and overawe [...] its object" ("On Life"). Shelley's semiotic "*unapprehended* relation of things" is akin to the gravitational attraction in *Prometheus*, since poetic sight (or perception) allows Prometheus and Asia to apprehend that which already exists in thought but is not observable in physical reality. By defining the poet as a Kantian manifold "I" who synthesizes, organizes, and reifies narratives of sensory stimuli, Shelley's poetic living includes meaningful engagement with the external world, through the cultivation of love, community, and awe. Cultivating and acknowledging sublime feelings and experiences is a precursor for Shelley's protagonists to produce objects of thought (including heightened emotion) in the physical world - that is, to engage in existential alchemy.

Since the plot of *Prometheus Unbound* relies upon an alchemical, poetic transmutation of desire into reality, we can see how *Prometheus* exemplifies Shelley's

philosophy of the poet as the creator, the prophet of everyday life. *Prometheus* begins with Prometheus exclaiming:

If my words had power  
 Though I am changed so that aught evil wish  
 Is dead within; although no memory be  
 Of what is hate, then let them not lose it now! (I.69-72).

By positing language - words - as an agent through which Prometheus could undergo a transformation that ended his despair, Shelley further corroborates his belief in the transformative power of using language intentionally. "If my words had power [...] let them not lose it now" declares Prometheus' position on language and poetic living as capable of producing physical manifestations; such creative production begins with language imbued with passion, authenticity, and meaning. Shelley's declaration of the importance of words - his 'Defence of Poetry' - parallels his proto-semiotic philosophy elucidated in his essay "On Life" in which he states: "The words *I*, and *you* and *they*, are grammatical devices invented simply for arrangement, and totally devoid of the intense and exclusive sense usually attached to them. [...] By the word THINGS is to be understood any object of thought, that is any thought upon which any other thought is employed, with an apprehension of distinction" (508). The interconnection between thought-forms and physical-forms is an intersection at which the poet can engage in poetic manifestation, producing themselves in the larger world. Prometheus' desire to manifest a reality that satiates his desires for Asia and a more equitable world echoes Shelley's own desire for an interconnected solidarity extant within all entities.

The fleshy intimacy within Shelley's writing is as intense and raw as the electric currents which so fascinated his imagination. For instance, in the first act of *Prometheus*, the Fourth Spirit delivers a soliloquy that echoes Shelley's personal life and his philosophy of poetics:

On a poet's lips I slept  
 Sleeping like a love-adept  
 In the sound his breathing kept;  
 Nor seeks nor finds he mortal blisses,  
 But feeds on the aerial kisses  
 Of shapes that haunt thought's wildernesses.  
 He will watch [...] The lake-reflected sun illumine  
 The yellow bees in the ivy-bloom,  
 Nor heed nor see, what things they be;  
 But from these create he can  
 Forms more real than living man,  
 Nurslings of immortality! (I. 737-479).

Shelley's masterful use of rhythm and poetry while touching upon the amorphous boundary between the real and the imaginary reflects his desire to live a life according to the values of freedom and love. Shelley's romanticism, as exemplified in this passage, is intertwined with physicality – lips, breathing, mortal blisses, kisses, wildernesses, and "forms more real than living man," call forth palpable, grabbable images of the physical world, despite Shelley using the Fourth Spirit in this passage to espouse an aerial philosophy of immortality. Shelley's Promethean paradise is founded on, and sustained by, the Love extant between Prometheus and Asia, a love that

transformed the very air and freed Prometheus of his emotional despair and bondage. Since the poet in this passage, who "feeds on the aerial kisses," is able to "create [...] forms more real than living man," Shelley presents the forms produced from "the love-adept" as vitalistic in the same sense as the gravitational attraction that forms bodies into matter through combination, cohesion, and decomposition.

Shelley's philosophy of sublime poetics is quasi-transcendent, as is physical experience in *Prometheus Unbound*, because he fully experiences heightened attention to the present moment while creating space for that which is unknown. In the Romantic interest in fragmentation lies the possibility for heightened emotion, selection, or choice, and open-ended futures. Prometheus describes his paradisiacal future to Asia as a phenomenal reality of a "simple dwelling, which shall be our own; / Where we will sit and talk" (Walker 154; Shelley, *Prometheus Unbound*, III.iii.22-23). While unapprehended objects of thought are essential for apprehension to occur, the unapprehendable sublime is irreducible to any phenomenal form.

Time is not universal but relative, and an individual's sense of time is dependent upon observation, or, to refer back to Humphry Davy's term, "PERCEPTION." Analogous to the influence of medieval science and poetry on Shelley's literary work, Davy's scientific work was also motivated by the medieval metaphysical philosophy in which an underlying and interconnecting force existed both non-locally, in the farthest reaches of the universe, and in human consciousness (Fullmer 172). The relation between consciousness, perception, and gravitational attraction only works within a framework of transcendental holism within the phenomenal world. As a theory that applies equally to "matter and immateriality," Paul Gilmore writes that Romantic era science "seems to refer to some intensified level of consciousness connected to the insights of poetic genius" (473); and that, therefore, a poet's ability to manifest life as an existential art-form is a matter of excitation, that is, a state-of-being in which the poetic subject experiences awe and in the destabilization, falls, in Shelley's words, "toward their [new] respective centres" (Miscellaneous Fragment XXXVI, *Complete Works*, 7: 107).

The ex-static combination of Prometheus' heightened attention in the enthralling moment of *ekstasis* enables him to make a heaven on earth with Asia (Hulme). For Shelley, everyday experience (i.e., a subject's perception of reality) can be altered through heightened emotion such as love. Affect "actualizes by representation," and likewise non-poetic existence is negated by its own manifestation (Huizinga 14). Johan Huizinga calls this type of transformation mystic, in which a "rite produces the effect which is [...] *actually reproduced* in the action. The function of the rite, therefore, is far from being merely imitative, it causes the worshippers to participate in the sacred happening itself [...] 'it is *methectic* rather than mimetic'" (15). Since, for Shelley, love is a powerful attraction that "connects [...] every thing which exists," so does love in language (methectically) affect love in everyday life. Essentially, the poetic imagination that synthesizes inner worlds with external environments imbues the poet with the ability to become the aesthetic by infusing the finite and physical world with the visionary and generative power of "an indestructible order" (Shelley, *Defence of Poetry*, 512). In *Prometheus Unbound*, Prometheus must be inspired, in the historical sense of being affected by a higher calling or power, so that he can aspire past the gravity of Jupiter's world (in this case, to his new life with Asia) (Sanders 194). Through inspiration and aspiration, Prometheus is able to create reality anew.

The love that motivates the plot in *Prometheus* exists as an entity in its own right (as Love) as well as in a strong, gravitational feeling of attraction (love) between

Prometheus and Asia. Yet, Love, with or without self-awareness, can be intensified to such a degree that feeling becomes solid matter in *Prometheus*. David Haney suggests that this inextricability between interiority and exteriority, or between "thought and language," is an "incarnational poetics" in which, for the Romantic, "thought's incarnation into meaningful language is a series of events" (35). While referentiality in postmodern deconstruction points to signs and their relationality to other signs, Shelley's semiotic referentiality emphasizes poesis as an image-made-real through the dynamicism of an eternality that is *ekstatic* and dynamic. For example, Shelley clarifies in Act 1 of *Prometheus* that substantive personal change can only occur by an individual owning themselves: for instance, Prometheus declares: "I am king over myself" and "[t]he sights with which thou torturest gird my soul/With new endurance, till the hour arrives/When they shall be no types of things which are" (I. 643-645). By taking responsibility for himself, Prometheus cultivates the emotional authenticity and embodied intensity that eventually frees him. The principle of attraction and repulsion in the Promethean universe relies on "cohesion and gravitation" to perpetuate assemblage, fragmentation, and poesis (Walker 153).

### Electromagnetism and the Transcendent

Shelley's untimely death in 1822 preceded Michael Faraday's creation of an electric current through magnetic fields by nearly a decade, but he was familiar with Hans Christian Ørsted's work on electromagnetism earlier in the nineteenth century. Paul Gilmore explains that "electricity begins as aesthetic and experiential," and electromagnetism certainly factored into Shelley's work (not to mention his wife's work, Mary Shelley's *Frankenstein*, in which electricity imbues the Monster with the spark of life [i.e., galvanism]) ("Romantic Electricity," 476). In Shelley's *Defence of Poetry*, electric cohesion has moral, social, and political implications - he writes - "It is impossible to read the compositions of the most celebrated writers of the present day without being startled with the electric life which burns within their words [,] [...] words which express what they understand not; [...] the influence which is moved not, but moves" (535). Prometheus' electric emotions affected action and thickened into "novel configurations" of matter (Hessel, 518). The associative forces of attraction and repulsion create gravity "among, within, between" objects of thought and objects of matter, and likewise physical gravity and emotional gravity coalesce in the Love extant in *Prometheus Unbound* as "beneath, around, within, [and] above." In *Prometheus*, romantic love functions much like the excitation of matter (as a thought-form of the imagination, or a physical-form of natural phenomena), which has the potential to transform everyday life, because, in Shelley's words, "to be a poet is to apprehend [...] the good which exists in the relation [...] between perception and expression" (*Defence of Poetry*, 512).

The electric fluid that the Romantics believed to be the natural agent or power in everything from the motion of celestial bodies to a human being's central nervous system, forged "the connection between material existence and consciousness" (Sha, "From Electrical Matter to Electric Bodies," 144; Gilmore, "Romantic Electricity," 486). The electric fluid within the human mind, imagination, and the natural world was proof for Shelley that the poetic synthesis between the poet's inner life and the external world results in autocatalysis. Since electricity, according to Romantic era science, flowed through anything that could execute an action, the ramifications of this electric fluid extended from external, epiphenomenal objects to internal (emotional, linguistic, conceptual) forms of imagination. Likewise, Richard Sha illuminates that "[i]nsofar as electric affect crosses mind and body, it also facilitates the idea of affect as thought and



thought as action" ("From Electrical Matter to Electric Bodies," 145). Electricity functioned as the "transactional exchange between subjects," making this electric fluid extant in both the social and scientific sphere (Sha, "From Electrical Matter to Electric Bodies," 145). Moreover, the non-Newtonian universe laws of physics that Shelley presents in his *Promethean* utopia correlate visible light (i.e., electric fluid) with personal enlightenment.

Carl Grabo explains that in Romantic science, "infinite energy is manifested variously in the activities or forces of light, heat, attraction, magnetism, electricity, and animation," and that "it is almost instinctive with Shelley to animate everything, even the most lifeless forms of matter" (100; 144). Shelley's "infinite energy" parallels the chemical elementality of Romantic science, yet, for Shelley, elemental Forms are also part of the epiphenomenal world through human action. If, as Humphry Davy said, "electric fluid is probably light in a condensed state," then Shelley might likewise explore what existence would be like in this "condensed state," including envisioning an evolution of the Earth under the aegis of Prometheus' love for Asia and for humanity ("An Essay on Heat, Light, and the Combinations of Light" 28). Shelley utilizes this metaphor in *Prometheus*: for example, when Asia and Panthea visit Demogorgon's cave, the increased velocity of the air that they fly through during their descent correlates to an increased entropy of time, which Shelley describes as an attraction and repulsion of electromagnetism:

While the sound whirls around,  
Down, down!  
As the fawn draws the hound,  
As the lightning the vapour,  
As a weak moth the taper;  
Death, despair; love, sorrow;  
Time both; to-day, to-morrow. (II.III.65).

Shelley's correlative associations here (e.g., "[a]s the fawn draws the hound") exhibit the gravitational attraction and repulsion within electrical sciences as a universal, motivating current in the human mind and in the external environment. The dialectic between attraction and repulsion that Shelley exhibits in *Prometheus* is synthesized through Asia and Prometheus' love, which is a participatory process that transforms the very air.<sup>9</sup>

Shelley's understanding of this electric fluid as an imageless force that both attracts and repels highlights the poet's ability to create phenomenal forms (realities) through poetic living (*Prometheus Unbound* II.IV.116). Since electric fluid is autocatalytic, the forces of attraction and repulsion contribute to the image-making power of the imagination's vital electricity. From the dialectic between the two poles of attraction and repulsion emerges chemical changes (Davy, *Elements of Chemical Philosophy*, 162). Recalling Sha's explanation that electricity during the Romantic period corresponded to causality, due to the "transactional exchange between subjects," such as the communication of nerves in the human body, the electric fluid enables the subject to experience the electricity's ability to express itself in various formats ("From Electrical Matter to Electric Bodies" 145). Insofar as Shelley's characters take ownership of their stories and futures from Jupiter's tyranny, they become alchemist-agents of their own lives.

While language functions within linear causality, Shelley nevertheless posits the potential of language to transcend its own framework and reveal a "paradise of

vaulted bowers": while "[o]nce the hungry Hours were hounds/[w]hich chased the Day like a bleeding deer," now "the web of the mystic measure" (III.IV.73-74, 129) is "too bright to see" (II.V.104-108) and "swifter than thought" (III.IV.274-275). That which is "swifter than thought," Shelley posits, is Love, which he capitalizes in the medieval style from which he is emulating, thereby putting forward a personification of love that is also animistic - existing "from beneath, around, within, above,/[f]illing thy void annihilation" (III.IV.353-354). Demogorgon rhetorically queries, "Fate, Time, Occasion, Chance, and Change?," "[t]o these/[a]ll things are subject but eternal Love" (II.IV.119-120), and this higher-dimensional Love is defined by a "[k]indling within the strings of the waved air/ [of] Aeolian modulations" (III.IV.187-188), and visible only as "shapes of light" (III.IV.80). Love, unbounded by the laws of physics that govern the respective directionality of a 3-dimensional world (e.g., "beneath, around, within, above") suggests a power that is transcendent of earthly limitation, but which is revealed in time, as time, through language's temporalization of time.

Asia's soul, expressed as possessing blinding, life-giving light transforms into a higher frequency and faster wavelength that grants Asia access to "the winds that fan that happy heaven": "Realms where the air we breathe is love,/Which in the winds and on the waves doth move,/Harmonizing this earth with what we feel above" (II.V.72-73, 87, 95-97). Shelley's focus on Asia's inner life transcends mere image (representation) and becomes physical reality, similar to an electrical connection between the human mind (perception) and the external world. Thus, like Prometheus, Asia's feelings of love and heightened emotion create not only a new sense of herself in that world but also a new world in itself.

By incorporating a transcendental *ekstasis*, Shelley is able to put forth a reality that transcends earthly, four-dimensional spacetime. This process by which *Prometheus* shifts from using thought and language passively (as a mimesis) to actively (methectically) participating in the representational regime allows for "not simply a representation [...] but a repetition of that event, with an efficaciousness of its own, in which *God* is not represented but presented" (Haney 97-98). The event that David Haney notices in Romantic literature grants the freedom for both light and electric fluid to co-exist as different parts of the same (electrical) system (35; Sha, "From Electrical Matter to Electric Bodies," 144). Likewise, Mark Lussier explains that the universal and underlying force of electricity acts as "a bridge between mind and matter, consciousness and cosmos, because both express themselves as complex wave patterns that interact and interfere to shape inner and outer reality"; and that the shaping of reality depends upon "an observer's own wave aspects [to] interact [and] to produce an interpretation" (*Romantic Dynamics* 146). Essentially, *Prometheus* presents characters who take ownership of themselves through their emotions, which causes the interference that transforms their world (Lussier, *Romantic Dynamics*, 157).

By visualizing the interplay of a set of characters in a narrative as "complex wave patterns that interact and interfere to shape inner and outer reality," Lussier contends that various states of information can be condensed into an intelligible process that can be "interpenetrated" (*Romantic Dynamics* 146). In *Prometheus*, once Jupiter is defeated and Prometheus is freed, the gravity and electricity of Prometheus' love for Asia lifts the life-negating, destructive veil of "perception over Earth"; Shelley also describes this in the line "The loathsome mask has fallen," the result of which, the Spirit of the Hour claims that "[m]y vision then grew clear, and I could see/[i]nto the mysteries of the universe" (III.IV.105). Analogous to Davy's point that electric fluid is light in condensed form, Shelley's scientific poetics condenses the multiplicity of material and immaterial realms into a unified, singular enfoldment. For Shelley, the

poetic individual participates in "the dialogic flow of competing waves of information, through patterns of interference," which "establish[es] a continually shifting node of consciousness" (Lussier, *Romantic Dynamics*, 157; Lussier, "Shelley's Poetics," 93). The "complex wave patterns" extant "between mind and matter," and which create "identity itself," have the potential for generating autocatalytic emergence in a system defined by a complex state in excitation (Lussier, "Shelley's Poetics," 93). Kinetic energy offers free will at the quantum level of wave-particle duality and the individual psyche: the excitation required for matter to move or to act correlates to a condensed and heated state; and the excited matter in *Prometheus* is the effect of a heightened emotional state. In making the transcendental "[r]ealms" from "above" an immediate reality, Shelley reorients the infinite as epiphenomenal, not in erasing the infinite, but, rather, by associating the infinite with the phenomenal world (II.V. 95, 97). Upon Asia's transformation, her sister Panthea cries at the blinding light emanating from Asia's body (II.V.17-18), but the bright "radiance" of "love, like [...] the sun's fire" that made Panthea unable to look at Asia is the multi-dimensional frequency of the electric fluid of excited, condensed light that makes things visible; this electricity running through any thing that has, or gives, motion is both an elemental Form and an epiphenomenal object.

Shelley's transcendental realm of love from above may be accessed through the underlying interconnectedness of "Man, one harmonious soul of many a soul" (III.IV.400-401); through the metaphor of the Earth as a sphere "which is as many thousand spheres [...] Ten thousand orbs involving and involved, [...] Sphere within sphere" (III.IV.238-243); and through "the deep music of the rolling world/Kindling within the strings of the waved air/Aeolian modulations" (III.IV.186-188). This intimate inextricability of the epiphenomenal world calls forth a concept of romantic love that is transcendent of human experience yet also definitive of everyday life. For Shelley, to love means opening up to the imageless within ourselves that enables us to live a life that resonates with us on a personal level. Insofar as the poet takes ownership of how their reality reflects their love, "the [Aeolian] enamored wind" will "[w]eave harmonies divine" (III.III.34-38). For the "powers that quell Death [...] [/] In the void's loose field" (i.e., "Love, Thought, and Breath") were powerful motivating agents in Shelley's own life (III.IV.150-152, 154). Shelley's *Prometheus Unbound* leaves us to reflect on how might we live a life that reflects our values, and how we might let the transformative, purifying, redemptive power of "fierce [...] love" take our lives to new heights (I.544-545).

## Notes

1. In this article, Isomaki explores the philosophical underpinnings of cause and effect in Shelley's writings. For example, he examines "the relation between the human mind and an external God" for Shelley, as well as his blurring "between internal and external sensations," which highlights Prometheus' ability to effect changes in his physical reality through heightened emotions (656).
2. For example, the 'electric fluid', which as Sha mentioned, was believed to be in everything from physical world objects to human consciousness and thought itself. Such *Naturphilosophie* reflects Wordsworth's spiritual beliefs of a universal force that "rolls through all things" ("Tintern Abbey").
3. See also Nikolaas Tinbergen's evolutionary theory 'toolkit' that specifies an organism's *causation* (blueprint) acts as an open-system with its *proximate/mechanistic* lifespan changes; from another perspective, Isabelle Stengers writes that "every point in the macrocanonical ensemble, has, when dispersion is complete, an equivalent probability of representing the system" (*Cosmopolitics II*, transl. Robert Bononno [Minnesota University Press], 2011), p. 165).
4. For a reading that considers more contemporary sciences, Mark Lussier's *Romantic Dynamics* explores the Romantic poets through contemporary quantum physics and complexity theory to better understand Romanticism in terms of interconnected holism instead of fragmentation. Moreover, Lussier's article "Shelley's Poetics, Wave Dynamics, and the Telling Rhythm of Complementarity" explores how "a poet [is] [...] capable of creating large-scale changes across interlocking systems," which is an essential part of the plot in *Prometheus Unbound* (93).
5. Shelley describes "poiein" in his *Defence of Poetry* as a poet's ability to synthesize ideas and information; the *OED* defines "poiesis" as "creative production."
6. Another connection to vitalism and a doubling-back motion, Trevor Levere writes that "Electricity acted upon magnetism [...] in which case electromagnetism could be interpreted as the action of electricity upon itself" (115).
7. See Immanuel Kant's definition of the sublime in *The Critique of Judgement* as "*an object (of nature) the representation of which determines the mind to regard the elevation of nature beyond our reach.* 98, italics mine.
8. Note the connection between Shelley's word choice of "vitality" and Romantic "vitalism," which Robert Mitchell defines as "a transnational European affair, as British, French, and German physicians, surgeons, philosophers, and literary authors struggled to understand the relationship of a 'principle of life' that seemed to animate and connect living beings to the concrete matter of which these bodies were composed." *Experimental Life: Vitalism in Romantic Science and Literature*, Johns Hopkins University Press, 2013, 2.
9. Sharon Ruston also notes that "Love, as identified in the poem as electricity and light, or Walker's 'one principle', has transformed the air and sunlight" (128).



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