

Cosmic Men:
Wyndham Lewis, Ernst Haeckel, and Paul Scheerbart

Kate Armond

“There is no such thing as *one* thing.”

“There is if I wish to have it so. And I wish to have it so.”

“You are a monist!” he said at this, with a contemptuous glance, curling his lip.

“All right. I am not a futurist anyway.”

Wyndham Lewis, *Blasting and Bombardiering* (1937) (BB 35)

The above skirmish between Wyndham Lewis and F. T. Marinetti is recorded in *Blasting and Bombardiering* and took place in 1914 as Lewis sought to distance himself from the swagger and spectacle of his Italian counterpart. In this instance Lewis mocks the Futurist’s aesthetic of speed, flux, and multiple images, all of which undermine the stark, clear lines celebrated by Vorticist art, and he accuses his adversary of misunderstanding the significance of machinery for the art-world. The counter-accusation that Lewis is a monist, and the related claim that there might indeed be but one thing in the universe, are well worth investigating in the context of Lewis’s work at this time. While much attention has been given to the very public dialogues, disputes, and debts of influence between Lewis and Italian Futurism, this article will shift the terms of Lewis’s engagement with European modernism to the formative years of the German Expressionist movement. What would a Vorticist understand by monism during the pre-war period and had any writers given their attention to this particular philosophical doctrine since Goethe and early nineteenth-century pantheism? Did other writers and artists also apply this doctrine in their work and how? My argument will suggest that at the time of his encounter with Marinetti, Lewis was not only familiar with the monist philosophy of Ernst Haeckel but also allowed Haeckel’s theories of a mechanistic cosmos to influence his Vorticist aesthetic.

So why has Ernst Haeckel failed to feature in Anglo-American modernist narratives and how might Lewis have encountered his ideas and publications? Haeckel was a German evolutionary biologist and anatomist whose monist theories became internationally popular and controversial during the late nineteenth and early twentieth centuries. In September 1899 his most successful work, *Die Welträtsel* [*The Riddle of the Universe*], appeared in German bookshops, selling over four hundred thousand copies in his homeland alone before the War in 1914.¹ The text enjoyed a voguish prominence in many American and European book collections thanks to its relatively accessible language, its Darwinian exposition, and its resurrection of a comprehensive monist world-picture that had lain dormant since the philosophies of Baruch Spinoza. Haeckel's writing, lectures, and public demonstrations combined the scholarly, the speculative, and the demotic in such a way as to consistently engage both academic and public interest. *The Riddle of the Universe* was translated into more than twenty-five languages during Haeckel's lifetime, with the first English translation appearing in 1900. Haeckel did not confine his ideas to words alone. He considered illustration to be a fundamental method of consolidating and disseminating his scientific research, and in 1904 his *Kunstformen der Natur* [*Art Forms in Nature*] appeared as a lavish volume containing a hundred lithographic plates of his biological artworks.² The creatures and life-forms he depicted in this text ranged from Haeckel's beloved Radiolaria (a type of marine Protozoa whose crystalline skeletons continued to preoccupy the scientist's thoughts throughout his career) to crabs, lizards, moulds, and tree ferns. It would have been almost impossible for Lewis to escape this visual aspect of Haeckel's influence on Germany's art-world when he arrived in Munich in 1906. The Englishman studied at a private art school, the Akademie Heymann, at a time of transition between the *Jugendstil* (Style of Youth) movement and proto-Expressionist experimentation. Haeckel's ornamental but clear-cut representations had found an enthusiastic reception among exponents of Germany's Art Nouveau style, but his ideas continued to inspire the next generation of *Der Blaue Reiter* (Blue Rider) artists and their successors. Wassily Kandinsky, Paul Klee, and Max Ernst all drew on his monist aesthetic and cosmological perspective, and whilst Haeckel the philosopher is perhaps now all but forgotten, the enduring legacy of Haeckel the artist can be seen by his current prominent place in the main bookshop of London's Tate Modern, where *Art Forms in*

Nature appears alongside books about Expressionist and Surrealist artists.

As Haeckel sets out his own monist tenets in *The Riddle of the Universe* he brings together nineteenth-century mechanistic materialism and the seventeenth-century pantheism of Baruch Spinoza: ‘In [Spinoza’s] pantheistic system the notion of the *world* (the universe, or the cosmos) is identical with the all-pervading notion of God [...] it is the purest and most rational monism’ (TRU 219). Drawing on Spinoza’s challenge to the mind-body dualism of René Descartes, Haeckel likewise dismisses the theistic dualities of matter and spirit, God and world, organic and inorganic in favour of a single universal substance: ‘This universal substance, the “divine nature of the world” shows us two different aspects of its being, or two fundamental attributes – matter (infinitely *extended* substance) and spirit (the all-embracing energy of thought)’ (TRU 219). Every object or phenomenon cognized by man is but a particular transitory form or differentiation of this one primary substance, and thus Haeckel brings to terms the physical sphere of matter and the apparently abstract intellectual realm of thought. His blend of baroque pantheistic divinity and Darwinian science allows him to dismiss both idealistic dualism and teleological theories of evolution. He discards the dualism inherent in anthropocentric and anthropomorphic dogmas as mere casuistry that strives to establish the human organism as a god-like pinnacle of creation in opposition to the rest of the natural world. Darwinian theories of evolution allowed Haeckel to promote a mechanistic world-picture in which individual life-forms arose and developed spontaneously, according to certain chemical and physical laws, heredity and adaptation, without dependency on a guiding divine or transcendental intelligence. Man becomes a provisional or evanescent stage in the constant evolution of Haeckel’s eternal substance, while ‘the supernatural and telic forces, to which the scientist had had recourse, have been rendered superfluous’ (TRU 264).

Had Haeckel’s exposition restricted itself to the realm of evolutionary science then his work might have remained a little less controversial. He distinguished himself from his Darwinian peers, however, through his determined efforts to apply science and philosophy to religion. His first English translator, Joseph McCabe, introduces him under precisely this banner, as a professor with ‘a unique claim to pronounce with authority, from the scientific side, on what is known as “the conflict of science and religion”’ (TRU viii). Haeckel

dispenses with the immaterial soul of theological and metaphysical discourse, proposing an alternative vague but mechanistic definition that allows all aspects of the material universe to possess a 'cell-soul'. He suggests that man and every multi-cellular organism develops from a single stem cell or 'cytula', and that this cell contains a latent configuration of physical and chemical energies referred to as its 'soul' (TRU 141-54). The entire Haeckelian universe is subject to this quality of 'ensoulment'. Established theologians were outspoken in their hostility towards Haeckel's materialism and his determination to reconcile the disciplines of science, philosophy, and religion.³ His ideas were at their most influential in the period leading up to the war of 1914, but propositions such as the Haeckelian universal substance were soon displaced by Einstein's theory of relativity, and his particular brand of monism began to fade from philosophical and scientific scholarship. As with Lewis, Haeckel's significance within more recent analysis has been overshadowed by connections with anti-Semitism, Nazi politics, and fascism. Daniel Gasman's 1971 *The Scientific Origins of National Socialism* gave voice to an interpretation of Haeckel's intellectual legacy that has continued to eclipse other aspects of his work. For Gasman, the German's monism, and his related explanation of evolutionary biology, directly fostered and shaped the worst excesses of National Socialism under Hitler: 'In general, the Haeckelian Monists readily assumed that nations were themselves representative of either lower or higher racial groups and that in the contemporary world it was the Germans who constituted the most advanced race.'⁴ Richard Weikart's *From Darwin to Hitler: Evolutionary Ethics, Eugenics and Racism in Germany* (2004), continues this dismissive and narrow contemporary evaluation of the monist's thought and influence, and as recently as February 2013 Haeckel featured in the article 'Twisted Logic', where he was one of several intellectuals linked to the Nazis.⁵

If scholarly review has overlooked and disparaged Haeckel since his death in 1919, then what qualities might have attracted Lewis to his work during the pre-war years? As a modernist outspoken in his hostility to Henri Bergson, Lewis would almost certainly have relished Haeckel's anti-vitalist stance. The turn of the century witnessed many exchanges between advocates of mechanist and vitalist theories, and the debate ranged across the sciences and philosophy. Haeckel's belief that natural selection occurs without divine intervention, and without a vital force regulating an organism's development internally, inevitably placed him

within the mechanist faction. *The Riddle of the Universe* describes the transcendental bias of teleological philosophy as a formidable obstacle to the advance of a rational and monist conception of nature. Haeckel goes on to regret an additional threat: the ‘ancient phantom of a mystic vital force which seemed to be effectively banished, has put in a fresh appearance’ (TRU 270). He defines the men wielding this resurrected menace as ‘neo-vitalists’, and accuses them of replacing the anthropomorphic deity with an unconscious, creative vital energy, ‘a mysterious, purposive natural force, which differed from the familiar forces of physics and chemistry, and only took these in part, during life, into its service’ (TRU 268). Haeckel denied accusations that his philosophy, and in particular his theory of ‘ensoulment’, was itself suggesting mystical properties for matter, stressing that he wanted only to confirm the mechanistic basis of all energy, thought, and tangible substance.

Attacks on orthodox theology aside, the German scientist courted controversy with the many illustrations that were so crucial to his scientific methodology. His Law of Biogenetics, stating that ontogeny recapitulates phylogeny, became one of his most original and enduring contributions to evolutionary science. Set out in his 1897 publication *Anthropogenie* [*The Evolution of Man*] this law claims that during its individual embryological genesis (ontogeny) an organism takes on the successive type-forms or morphology of its ancestors (phylogeny).⁶ Haeckel’s drawings and plates of these embryological stages, and other illustrations showing unicellular marine life-forms, were censured because they seemed to depart from exact, scientifically accurate representation. His response was that he considered his role as artist and scientist to be one of interpretation, revealing latent organizational principles or configurations that were not visible to others. His radiolaria artworks, for example, show the visible empirical forms modified by geometric, crystalline patterns that Haeckel believed to be the essence of their structures. This emphasis on a strong visual aesthetic of geometrical, intuited forms has strong affinities with Lewis’s Vorticist programme and may in part account for Haeckel’s appeal, if not influence, at this stage of Lewis’s career. *BLAST* likewise attacks representational art in its assumption that the artwork can be legitimized by qualities intrinsic to the object as it exists within a mere visual-cognitive reproduction: ‘Imitation and inherently unselective registering of impressions is an absurdity. It will never give you the meaning of the

object or scene which is its spiritual weight' (B2 45). In the first edition of *BLAST* Lewis makes a similar point when criticizing the contemporary art-world. Vorticists 'are not Naturalists, Impressionists or Futurists (the latest form of Impressionism), and do not depend on the appearance of the world for [their] art' (B1 7). While neither artist wants to escape nature's forms, both men suggest a distinction between the evidence of the phenomenal world and an aesthetically coveted essence: 'the essence of an object is beyond and often in contradiction to, it's [*sic*] simple truth' (B2 45). Their aesthetic designs are an inherent part of the object but one that can be realized only by the essentialist reinterpretation of the artist as he moves towards mediating and elucidating his chosen forms.

Lewis's own elaboration of a Vorticist aesthetic on a cosmological scale takes place in his 1914 play *Enemy of the Stars* and the surrounding text of *BLAST*. Lewis's Vorticist drama traces the conflict between Arghol and Hanp, with Arghol as the central character, an early incarnation of Lewis's solitary and antagonistic artist figure, and Hanp as the object of his contempt. Arghol has abandoned his life as a university scholar in Berlin to pursue the more mundane, manual tasks of the wheelwright, in the company of his comrade. Critics who have examined this drama in the context of German philosophy have tended to linger over the work of Friedrich Nietzsche, Arthur Schopenhauer, and Max Stirner, Arghol's acknowledged master. The solipsistic arguments of Stirner's 1844 *The Ego and its Own* dismiss all spiritual and philosophical absolutes in favour of a self-sufficient individual existing within a purely historical realm. Toby Avard Foshay draws attention to the paradox of Arghol's role as a Stirnerian disciple. Lewis's protagonist, he argues, 'not only [...] embraced solipsism but in the very act of doing so had undermined the apparent logic of egoistic self-sufficiency in becoming the follower of a doctrine which itself rejects the notion of any ego patterning itself after another'.⁷ Toby Myrthen's account of the play recognizes the influence of Stirner, while claiming that Lewis's main preoccupation was Nietzsche's critique of western nihilism. He sees *Enemy of the Stars* as Lewis's attempt to formulate a positive alternative to Nietzschean 'titanism and afflatus' – the legacy of untrammelled will-to-power.⁸ Paul Edwards suggests that the play 'thinks through, or argues with, the various considerations of asceticism by Schopenhauer, Stirner and Nietzsche', drawing parallels between Arghol's imagery and Schopenhauer's essay 'Additional Remarks on the Doctrine of the

Suffering of the World'.⁹ This article will suggest that the dominant philosophy shaping Lewis's Vorticist universe is the monism of Ernst Haeckel, and, in the battle that is staged between mechanistic cosmology and Stirnerian individualism, the former triumphs indisputably over the latter.

The Vorticist universe as set out in *BLAST* is explicitly mechanistic in the best Haeckelian tradition: 'The vortex is the point of maximum energy, / It represents, in mechanics, the greatest efficiency', and *BLAST* goes on to insist that 'greatest efficiency' and 'mechanics' must have their precise scientific meaning (*B1* 153). I will return to this image of vortex and Haeckel's interpretation of energy and entropy. As is the case with *The Riddle of the Universe, Enemy of the Stars* gives this materialist philosophy its full cosmic interpretation, as 'THE RED WALLS OF THE UNIVERSE' (*B1* 61) close around Arghol, and the stars become his cast. Lewis is no more keen to dispense with God than his German contemporary – the light of Arghol's initial encounter with the stars is described as '[i]mmense bleak electric advertisement of God' (*B1* 64). This is no dualist deity, however, and Lewis presents the stars as 'pantheistic machines' (*B1* 64) accordingly. For Lewis to make repeated reference to the soul might seem incongruous, but Haeckel's materialistic reworking of the term helps to clarify some of the play's bewildering images, such as '[a] soul wettest dough, doughest lead: a bullet. To drop down Eternity like a plummet' (*B1* 68) and '[s]oul perched like aviator in basin of skull, more alert and smaller than on any other occasion' (*B1* 75). The ephemeral and immortal is now firmly anchored in the realm of matter through qualities of weight, mass, size, saturation, and even posture. Haeckel's theories also give particular significance to single-cell organisms such as amoebas, continuing Goethe's monist tendency to identify the totality of nature in the most diminutive elements of her constituent parts. *The Riddle of the Universe* argues that the 'higher psychic activity of the higher animals and man', that is to say, reason, consciousness, and the formation of ideas, have phylogenetically evolved from the 'lower psychic life of the unicellular protist and plant' (*TRU* 93), a psychic life that in turn consists of reflexes and instincts of self-preservation. The difference between the higher and lower evolutionary forms is therefore one of more sophisticated interpretation and centralization, with the higher species remaining derivative and connected. The strange composite forms of Arghol's dream-world continue Haeckel's sense of this interrelated

evolutionary chain in which the protozoa are naïve blueprints for all life-forms – we are given ‘one per cent. animal, these immense bird-amoebas’ (B1 67). Such creatures also gesture towards some of Lewis’s post-war artworks and fictions. His 1921 ‘Abstract Figure Studies’, for example, presents an evolutionary pillar with a lower level that combines human embryonic shapes, fish-fins, and mechanistic forms also suggestive of amoebas. Further up the pillar we find more geometric structures and an anonymous human body. Lewis seems to adopt the levelling perspective of monist philosophy to establish the interconnectedness of man and even the most humble unicellular creature. His wartime story ‘Cantelman’s Spring Mate’ likewise places man at the threshold of an animal identity as the war becomes a materialist evolutionary struggle and Cantelman himself becomes an insect-like being heavily weighted by mechanistic forces. This reduction of man to anonymous, expendable matter is perhaps nowhere more eloquently expressed than in Lewis’s essay ‘The European War and Great Communities’, which appeared in the second issue of *BLAST*. Here the female body is satirically celebrated as the manufacturer of children, ‘little human cartridges’ that take some sixteen years to fill and polish, a wartime resource more celebrated than ammunition and camouflage clothing.

While dualist theories of substance propose a material and an immaterial realm of existence, Haeckel believed that his unified conception of substance could reconcile the physical sphere of matter, or as he termed it ‘ponderable matter’, and the realm of thought or energy: ‘The conviction that these two cosmic theorems, the chemical law of the persistence of matter and the physical law of the persistence of force, are fundamentally one is of the utmost importance in our monistic system. The two theories are just as intimately united as their subjects – matter and force or energy’ (TRU 218). A mode of substance would be material when regarded under the attribute of ‘extension’, which Haeckel defines as the occupation of space, but would be a force or idea when considered under the attribute of thought or energy. Lewis appears to offer an aesthetic interpretation of this particular aspect of the definition of substance as he describes Arghol’s fight with Hanp in *Enemy of the Stars*:

The bleak misty hospital of the horizon grew pale with fluid of anger.

Lewis, Haeckel, and Scheerbart

The trees were wiped out in a blow
The hut became a new boat inebriated with electric milk
passion, poured in. [...]
Arms of grey windmills, grinding anger on stone of the new
heart.

(B1 75)

The abstract feelings and thoughts associated with anger become a fluid, which, when combined with the word ‘misty’, seems to suggest a vapour filling the indefinite space of the horizon, which in turn is given a second blurred form with the word ‘hospital’. As a fluid anger takes on the spatial or ‘ponderable’ qualities of density, mass, and volume, and as the fluid expands to enter the hut it becomes ‘milky’ and can be ‘poured’ – in other words it condenses to form a liquid with the result that its mass will increase while its volume, or the amount of space it occupies, will decrease. With the final part of this composite image anger has taken on the qualities of a solid so dense that it must be ground between stones just as grain is processed. Having projected anger towards the ultimate distance of the horizon, Lewis then draws it back towards the protagonist as the next phrase places it inside the hut. In a final retraction of perspective, anger resumes its seat in the human body as the flailing arms of the combatants become the sails of a windmill, their hearts containing the emotion. This receding perspectival projection followed by advancing movement closer to the protagonist allows Lewis complete spatial extension for the immaterial thoughts and feelings of this encounter, as the abstract readily combines with elements of the surrounding landscape. Lewis has also filtered this immaterial mode through three of the five Haeckelian conditions of matter – the liquid, the gaseous, and the solid. *Enemy of the Stars* abounds with such exchanges between seemingly distinct and irreconcilable modes of substance. This sense of cohesion between living and inanimate or inorganic worlds allowed Haeckel to follow Goethe in suggesting that even elemental atoms possessed quasi-mental qualities, expressed through their chemical affinities.

Haeckel goes on to divide his universe again into two fundamental properties – matter and ether. Ether is not composed of chemical atoms, has no quantifiable weight, and fills the whole of space insofar as it is not occupied by ponderable matter. The eternal, dynamic interaction between these two apparently opposing properties is the

ultimate cause of all phenomena. Ether manifests itself and functions through light, electricity, magnetism, and radiant heat, and mass presents itself and functions through gravity, inertia, and chemical affinities. The Vorticist universe is also a dynamic force-field of antagonistic or rival forces – the Vorticist starts ‘from opposite statements of a chosen world’: ‘We fight first on one side, then on the other, but always for the SAME cause, which is neither side or both sides and ours’ (B1 30). This seemingly contradictory claim makes greater sense from Haeckel’s monist perspective, since his law of the persistence of force states that there is ‘constant reciprocity’ (TRU 234) between the two chief types of substance, matter and ether. Monist forces in counterpoint therefore have the same ‘cause’, the universal law of substance, and are subject to reciprocal transformations and conversions between two opposing forms of energy. In *Enemy of the Stars* Lewis’s Vorticist universe plays out between these two modes of substance. At times etheric phenomena seem to enjoy ascendancy, with the brutal light that blazes over Arghol an ‘[i]mmense bleak advertisement of God’ and the stars ‘placid in electric atmosphere’ (B1 64). The atmosphere is also one of ‘heavy radiance’ (B1 64), with Arghol himself a ‘POISED MAGNET OF SUBTLE, VAST, SELFISH THINGS’ (B1 61). Other images allow ponderable matter and its related functions of gravity and inertia to become the dominant energy, weighing down every sensory and intellectual element of experience and hindering action: a ‘noise falls on the cream of Posterity’ (B1 61), a ‘leaden gob [...] first drop of violent night, spreads cataclysmically’ (B1 62), and Arghol’s ‘calm long instrument of thought, was too heavy. It weighed him down’ (B1 74). Arghol’s passivity and inertia in the face of his uncle’s beatings bewilder Hanp. The dynamic force-fields of Lewis’s drama enact the third law of Haeckel’s monist cosmogony – ‘substance is everywhere and always in uninterrupted movement and transformation: nowhere is there perfect repose and rigidity’ (TRU 247).

One of the ways in which Lewis sought to differentiate between Vorticism and Marinetti’s Futurism was through his aesthetic of force. While the Futurist equated power and dynamism with speed and representations of kinetic energy such as trains and automobiles, the Vorticist favoured the majestic, poised energy of the factory, the ship, or heavy machinery. Here Lewis’s interpretation of energy and force is in accord with Haeckel’s belief that ‘the whole drama of nature apparently consists in an alternation of movement and repose, yet the bodies at rest

have an inalienable quality of force, just as truly as those that are in motion' (TRU 236). It is this veneration of potential energy, and the balance between power, violence, and stasis, that give Vorticist forms their distinctive discipline, a sense of great force mastered and sustained in tension. Lewis claims the same qualities for the artist himself, as the Vorticist is 'at his maximum point of energy when stillest' (B1 148). A discussion of the Vorticist representation of force should also question the significance of the symbol of the vortex in this monist interpretation of *BLAST*. An equivalent structure in Haeckel's philosophy would be the theory of the universe as *perpetuum mobile*, that is to say, as an eternal cosmic process without beginning or end, in which the kinetic and potential energy are being continually transformed, and the sum of both types of energy remains constant. Such a thesis requires Haeckel to contradict the theory of entropy as set out in the Second Law of Thermodynamics. This law states that entropy is constantly increasing in our finite universe. As entropy is a thermodynamic measure of a system's energy that is unavailable for conversion into productive work, this would entail a gradual descent into disorder until no energy remains in a form suitable for use, a phenomenon referred to as heat death or absolute chaos. Haeckel's counter-argument explains that such a decline is impossible as the universe 'sustains itself in eternal and uninterrupted movement, because every impediment is compensated by an "equivalence of energy"' (TRU 252). So although Haeckel dismisses the idea that any isolated part of the cosmos could behave as a *perpetuum mobile*, this is precisely his sense of how the universe as a whole functions.

In choosing the vortex as a symbol for his modernist aesthetic, Lewis has chosen a system of circular motion that transports mass and energy. The fluids that form vortices, however, exhibit viscosity and so the system must inevitably dissipate. Such vortices are the susceptible and short-lived energy systems of Futurist art. The smooth, solid black cone or funnel shape that represents the vortex throughout the pages of *BLAST* is a very different form from Giacomo Balla's translucent and diffuse 'Vortice, Spazio, Forme', allowing the first edition of *BLAST* to dismiss Futurism as 'the disgorging spray of a vortex with no drive behind it, DISPERSAL' (B1 153) and, with Impressionism, as 'CORPSES of VORTICES' (B1 154). The ideal system of forces that Lewis has in mind is constantly changing without entropy or closure. Just as with Haeckel's kinetic and potential energy and his divisions of

matter and ether, the opposed valuations of the Vorticist cosmos are not allowed to overwhelm or negate their counterparts. Whether Lewis writes of ‘eternal black sunlight’ (B1 64), ‘boiling starry cold’ (B1 67), or of transitions from mass and gravity to radiant light and ether, his vortex does not fix these valuations in rigid diametric opposition but allows each the provisional escape towards synthesis. His vortex realizes its momentum from this tension. Dynamism exists alongside the potential stasis of each valuation and its opposite, and for this reason Lewis can claim that ‘our Vortex desires the immobile rhythm of its swiftness’ (B1 149). Like Haeckel’s *perpetuum mobile*, Lewis’s aesthetic defies entropy.

Paul Scheerbart’s *Lesabéndio* and Pallasian Monism

Lewis was not alone in his fictional renderings of a monist universe during the pre-war years. The year before *BLAST*’s first edition a German poet, journalist, and architectural writer called Paul Scheerbart published *Lesabéndio: Ein Asteroiden-Roman* [*Lesabéndio: An Asteroid Novel*].¹⁰ This cosmic fantasy set on the asteroid Pallas follows the lives of its salamander-like inhabitants as they undertake the design and construction of an enormous tower that will join together the two halves of their planet. Lesabéndio, or Lesa, is the most influential of these creatures and becomes the focus of the final scenes of monist transformation. Pallasians smoke bubble-weed, defy procreative norms by emerging fully-formed from nuts excavated and cracked open by their elders, and bypass the digestive process by absorbing nutrients from mushrooms and fungi through pores in their bodies. This was by no means Scheerbart’s first cosmic tale – his 1912 *Astrale Novelletten* [*Astral Short Stories*] were set against the backdrop of planets such as Mercury and Jupiter.¹¹ With his knowledge of German and his interest in the Expressionist art-world at this time it is likely that Lewis was familiar with Scheerbart’s work. The German’s first novel, *Das Paradies: Die Heimat der Kunst* [*Paradise: Homeland of Art*], appeared in 1889 and tells of a visit to paradise by a coterie of devils, with the devil-poet as chief protagonist.¹² They leave their native Hell to be shown the delights of paradise, a vibrant crystalline utopia for both art and architecture, in the company of angels and witches. *The Human Age*, Lewis’s trilogy of cosmic adventures, can be seen as in part a parody of this tale, as Pullman and his companion Satterthwaite enter a realm that should be

paradise or heaven only to discover that both art and artists are feared and obstructed by the Bailiff in his realm. Lewis keeps the same cast of characters with giant devils and angels, and even the Bailiff's mother as 'a flashing witch, clutching a metaphysical broomstick in an astral night' (MF 315). The tour-guides for Pullman as devil-poet, or rather devil-writer, are satanic acolytes such as Sentoryen, and, having glimpsed the very worst of Third City, the sight-seeing continues as Pullman is transported to Hell where he is swiftly instated as Satan's right-hand man. Scheerbart's 1914 publication *Glas Architektur* [*Glass Architecture*] is focused firmly on earth rather than the wider cosmos. Here he sets out his plans for utopian glass designs in post-war Europe, inspiring the Expressionist architect Bruno Taut to his own *Alpine Architektur* [*Alpine Architecture*].¹³ While I consider the possible influence of these two architectural works on Lewis's *Human Age* trilogy elsewhere, this discussion of Lewis and monism will focus on strong similarities between *Lesabéndio* and *Enemy of the Stars*.¹⁴

Scheerbart, like Haeckel, has fallen from grace and prominence in modernist narratives despite his inspirational utopian visions. When, in 1917, Walter Benjamin received a copy of *Lesabéndio* as a wedding present from Gerhard Scholem, he became a great admirer of Scheerbart's work, planning an extensive philosophical analysis of the text, a project that remained unrealized at the time of Benjamin's death. Having diagnosed modernity's flawed determination to exploit natural resources and misuse technology, Benjamin warmed to Scheerbart's creation of a world in which technology and nature were not antithetical but identical and liberated from economic imperatives. The Pallasian snap-nuts containing the planet's young, for example, are mined in much the same way that man would search for mineral ores, and the Kaddimohn steel used to build the great tower is excavated as rods that need no industrial processing before construction. Benjamin's contemporaries were, however, less susceptible to Scheerbart's literary and imaginative talents. *Lesabéndio* was not a success in Germany and therefore failed to receive an English-language translation. This lack of international recognition, the tendency to dismiss his work as proto-Science Fiction, the war, and Scheerbart's untimely death in 1915 all contributed to his neglect. It is perhaps timely that Wakefield Press published *Lesabéndio* in its first and only English translation on the 30th of December 2012, bringing the novel into company with their 2011

edition of Scheerbart's *Das Perpetuum Mobile* [*The Perpetual Motion Machine*],¹⁵

For much of *Lesabéndio* the Pallasians enjoy a peaceful existence that is free from pain and injury, a utopian context that appears at odds with Arghol's world of violence and abjection. Both texts, however, open with the vivid and unnatural chromatic world of the Expressionist drama. The Vorticist universe is defined by its 'ponderous arabesques of red cloud' (B1 67) and the oppressive red walls that close in around Arghol, and Pallas enjoys violet skies containing a green sun and stars. The cosmic theatre of 'The Night' episode of Lewis's play and the Pallasian night share the same qualities of brutal light and strangely organic electricity, but while Arghol can only wonder if that energy will one day reach earth the Pallasians' bodies already possess this electric charge. Both Lewis and Scheerbart seem content to let their cosmic systems alternate between Haeckelian qualities of ether and ponderable matter. Pallas is divided into two halves, the north and south funnels. Gravity in the south funnel inverts everything at night, and the lack of a single centre of gravity means that a 'Pallasian's head might point in any direction under the sun without the slightest discomfort being felt' (Scheerbart, *LAN* 28). More transformations of ponderable matter occur as the planet's night cloud shifts physical relationships of weight and centripetal attraction in delicate ways. Nor is the etheric phenomenon of magnetism overlooked as Pallasians rush at great speed from one destination to another by attaching themselves to magnetic highways or belts. The black cone or funnel shape that symbolizes Lewis's vortex in *BLAST*, and that is always represented with its tip uppermost, has obvious similarities with the structure of Pallas – 'the top part of the double-star binary system looks like a cone or funnel whose tip is pointing upward' (Scheerbart, *LAN* 8).

The claim that Pallas is a double star creates a far more significant link between the two works. As Hugh Kenner first suggested, Arghol may be named after the double star Algol or Alpha Persei.¹⁶ Double or binary stars are composed of two celestial bodies, one luminous and the other less brilliant in its radiance. Algol was one of the first eclipsing binaries to be discovered, with the astronomer Hermann Vogel publishing photographs of this spectrum in November 1889. The two suns or stars orbit a common centre of gravity, and, in the case of Algol, the more radiant Alpha Persei is regularly eclipsed by the dimmer Beta Persei. The light curve of Algol was first determined and publicized in

1910, so for both Lewis and Scheerbart the binary star system was a pertinent and powerful contemporary image for their monist cosmologies and related explorations of selfhood.¹⁷ To complete the circle of links and affinities, Scheerbart was himself involved in the early stages of an Expressionist project based around the double star Algol. Although the film in question, *Algol: Tragödie der Macht* [*Algol: Tragedy of Power*] was delayed by the War, and was only released in September 1920, Scheerbart was credited with the original vision for the story and in particular its cosmic setting of ‘space in its ultimate juxtaposition with Eternity’.¹⁸ In his 1924 review of Expressionist creativity Herman Scheffauer records: ‘Another filmplay, “Algol”, the scene of which is laid on the star of that name – a vision of Paul Scheerbart’s, the poet architect – had also been “staged” by Walter Reimann. [...] There are surfaces of snow and silver [...], sharp crags rising like outstretched arms to the stars. [...] A Dantesque vision, the marriage of space and matter.’¹⁹ The film explores the power dynamic between father and son and their exploitation of a machine given to the father by a being from Algol. Until very recently this silent film was considered lost. Now rediscovered and restored, it featured in the 2010 American MoMA film exhibition, ‘Weimar Cinema 1919-1933: Daydream and Nightmares’.

In *Lesabéndio* the Pallasian’s interest in the double star system becomes a catalyst for the tower project, as these intriguing life-forms decide to further explore the structure of their planet. Most of the initial research into binary systems is carried out by the elderly Biba, a philosopher and amateur astronomer with a particular interest in other areas of the cosmos and a longing to live on the sun. Over the course of three days Biba studies three thousand double star configurations and decides to share his findings by publishing several short books: ‘At first Biba’s books made powerful inroads on popular opinion. No one could stop talking about the astral double system. It was undeniable: the book made the Pallasians more and more curious to learn more about the type of double nature possessed by their star’ (Scheerbart, *LAN* 79). The Pallasians surmise that their star’s head-system must be located above the cobweb-cloud of spider silk that hovers over the north funnel. The construction of a huge tower, at Lesa’s instigation, becomes a means to defy the anti-gravitational force exerted by this light-cloud and explore beyond it. The story traces the realization of this plan and the conflicts and problems encountered as it unsettles the utopian quality of Pallasian existence.

Lesabéndio's project necessitates almost universal co-operation and participation from his fellow-Pallasians, but this does not mean that he works unchallenged. Peka's talents lie in architectural design, and his proposed angular, crystalline structures for the tower represent a distraction from Lesa's programme and are repeatedly thwarted. Manesi is the individual responsible for growing climbing tendril plants and the mushroom and fungi meadows that sustain Pallasians. As both Peka and Manesi are undermined and weakened they undergo a strange process of absorption, passing into Lesabéndio's body through his pores: 'Pallasians who absorb many dying fellow beings receive a steady growing vitality from them' (Scheerbart, *LAN* 43). Biba feels that Lesa would like to be absorbed by an astral body rather than by another Pallasian when his time comes. Lesabéndio does indeed undergo this monist transformation once the tower is complete, and he is able to pass beyond the cobweb-cloud to merge with the star as its two halves come together: 'Lesabéndio [...] had the sense that he was gradually turning into a star. The interests of the Pallasians no longer touched him. He noticed that he was developing new organs again [...] he powerfully stretched out his entire body – and realised that his body was the entire torso-system of Pallas. The double star rotated onward' (Scheerbart, *LAN* 221). Scheerbart was an avid reader of Haeckel's work and behind Lesa's astral metamorphosis is the Haeckelian redefinition of evolution. Works such as *The Riddle of the Universe* extrapolate Darwin's evolutionary law of organic life-forms beyond the confines of the initial thesis to include cosmic bodies and geological phenomena, while Haeckel's theory of one universal substance allows the identity of Lesa to pass swiftly, if not painlessly, from Pallasian to binary star. It is a transformation and union that confirms the lack of differentiation between phenomena within the Haeckelian universe whilst providing the ultimate cosmic expression of a common monist substrate.

Lesa and Arghol share the desire to establish a definition of individual personality or self, and to give that identity its rightful cosmic significance. Before Lesa absorbs Manesi, he and Biba wish 'if only we had a more precise understanding of what selfhood actually is' (Scheerbart, *LAN* 158). As *Enemy of the Stars* progresses we realize that Arghol's point of departure in this quest is a Stirnerian celebration of the unique and powerful ego, and a strong desire to liberate himself from a seemingly inescapable social identity. He renounces friends, fellow scholars, and academic masters accordingly, withdrawing to the

wheelwright's yard where he encounters Hanp. While nurturing his elitist persona, Arghol has also shown a desire to educate and redeem the ignorant Hanp. This social contact brings about a merging of identities, as Arghol realizes that Hanp has become a version of himself, a 'naif yapping Poodle-parasite' (B1 73). He in turn has forsaken the sensitive girlish qualities attributed to him as the play opens, adopting instead the brutal violence associated with his work-mate. Both Scheerbart and Lewis extend their representations of this interconnectedness or mutual interpenetration to include a sort of cannibalistic assimilation of the other – a 'man eats his mutton chop, forgetting it is his neighbour' (B1 67). Lewis provides a darker, figurative version of the Pallasian process of death and absorption. For Arghol, the other 'self' cannot be overcome: 'I have smashed it against me, but it still writhes, turbulent mess. I have shrunk it in frosty climates, but it has filtered filth inward through me, dispersed till my deepest solitude is impure' (B1 71). As Lesa is about to absorb Peka, Biba tells his leader: 'You need a greater sense of calm. Peka will give it to you. Now you can experience how Peka takes effect within you' (Scheerbart, LAN 158). Arghol is bitterly resigned to this defiling internalization of another's identity, whilst Scheerbart's Pallasians are calmly revitalized as the absorbed personality lives on in the recipient. Arghol's cosmic etymology also allows for this mutuality, as the two stars of Algol's system revolve around a common centre of mass that can be transferred from one binary to another, and the Arabian name for Algol, Al-ghūl, translates to mean 'ogre' or 'cannibal'.

At the time of Lesa's transfiguration Scheerbart pays homage to Haeckel's ideas with an allusion to the *The Riddle of the Universe*: 'The riddle of life can be taken seriously [...]. In any case the transformation of one life form will solve a few riddles' (TRU 186). Set in the context of Haeckel's theory the transformation from one species to astral body certainly solves, or confirms, the question of a universal monist substrate. There may also be an allusion to the title of Haeckel's *The Riddle of the Universe* at a crucial point in Lewis's drama as Arghol finally realizes the impossibility of sustaining Stirnerian individualism:

Suddenly through confused struggles and vague successions
of scenes, a new state of mind asserted itself.

A *riddle* had been solved. [...]

He was Arghol once more. [...]

He had ventured in his solitude and failed. Arghol he had imagined left in the city. – Suddenly he had discovered Arghol who had followed him, in Hanp. Always a deux! (B1 80)

Here the riddle solved is also the discovery of a monist mutuality that must contradict Stirner's desire for detachment. In *The Riddle of the Universe* Haeckel himself casts aside the extravagant individualism of Stirner and Nietzsche, a position he confirms in 1904 with his publication of *Die Lebenswunder* [*The Wonder of Life*].²⁰ Haeckel's monist ethics have their roots in Darwinian evolution, arguing that the highest aim of morality is to establish a balance and harmony between egoism and altruism: 'Egoism secures the self-preservation of the individual, altruism that of the species which is made up of the chain of perishable individuals' (TRU 359). He goes on to state that unity, interdependency, and collaboration are integral to natural selection and are simply higher evolutionary stages of more fundamental social instincts. Haeckel concludes that 'one might even say altruism, [egoism's] apparent opposite, is only an enlightened egoism' (TRU 361). This blend of self-assertion and submission is repeated as the dominant ethic of Pallasian society: 'We should all strive after the greatest possible autonomy and gain it, but at the same time constantly be intent on surrendering ourselves to what is greater than we are' (Scheerbart, *LAN* 210), that is to say, the greater good of all Pallasians and the wider cosmos.

Scheerbart's novel closes with Lesa's transfiguration as his physical body dissipates and he is received by the binary star system. The process of this transfiguration is as powerful and terrifying for Lesabéndio and the Pallasian onlookers as the results are peaceful and enlightening. *Enemy of the Stars* begins by introducing the 'CLOSE ATMOSPHERE OF TERROR AND NECESSITY' (B1 61) that will attend Arghol's fate and that his audience cannot escape. He indicates at this early stage in the drama that the universe will receive Arghol in death, closing its red walls around him, only to recede, satisfied when Arghol is no more. Both Lesa and Arghol find their strange wordless communication and exchanges with the stars exhilarating yet disorientating. As Lesa begins his transformation he loses his customary sensory faculties: 'Lesa sensed more and more that he no longer perceived or thought in the ways he had before the transformation' (Scheerbart, *LAN* 205). As Arghol's engagement with the stars and wider cosmos is made clear from the outset, Lewis is able to suggest his

protagonist's sensory transformation through the language and images that describe his universe – granite flowers, skies that sweep and ‘crash[] silently’, and ‘eternal black sunlight’ (B1 64). Lesa believes that he can understand the clouds communicating with him through ‘a language consisting of different pressures’ (Scheerbart, *LAN* 194), while Lewis describes Arghol experiencing similar tactile pressures – ‘his soul like ocean-town; leant on by two skies. Lower opaque one washes it with noisy clouds’ (B1 69). Arghol’s consciousness is formed and weighted by a process of astral filtering and exchange: ‘Anything I possess is drunk up here on the world’s brink, by big stars, and returned me in the shape of thought heavy as a meteorite [*sic*]’ (B1 70). The stars transfer a certain monist energy to Arghol that he does not understand but is ready to turn to account: ‘Energy has been fixed on me from nowhere – heavy and astonished: resigned. [...] I will use it, anyway, as prisoner his bowl or sheet for escape’ (B1 68). This energy finds its parallel in the strange light that appears on Pallas at the time of Lesa’s transformation. Dex, a visiting Quikkoyaner from another star, ‘noticed that long exposure to the carmine-red light created an excitement in his body that he had never felt before [...]. The light was energising more than anything else’ (Scheerbart, *LAN* 203). The Pallasians also make use of this resource by going to bathe in it. While *Enemy of the Stars* does not close with a spectacular and ecstatic monist transformation to rival that of *Lesabéndio*, Lewis does suggest a response from the wider cosmos once Arghol has been murdered, and the same sense of peace that accompanies Lesa’s corporeal death:

The night was suddenly absurdly peaceful, trying richly to please [Hanp] with gracious movements of trees, and gay precessions of arctic clouds.

Relief of grateful universe. (B1 84)

It is left to Arghol himself, some pages earlier, to suggest the metamorphosis and astral union that might occur after his demise: ‘To leave violently slow monotonous life is to take header into the boiling starry cold. (For with me some guilty fire of friction unspent in solitariness, will reach the stars.)’ (B1 67). The image of ‘taking header’ into stellar space cannot but recall Lesa’s own journey to death and union with the two stars of Pallas as he launches himself head-first into the cosmos beyond the cobweb-cloud. The ‘fire of friction unspent in solitariness’

refers to that element of Arghol's being not exhausted by Stirnerian exclusivity and egoism, a fundamental monist energy that will further the sort of transfer from man to astral body that Arghol seems to envisage here.

Lewis's writing, and his sense of the artist or intellectual leader, can be said to vacillate between the poles of elitist visionary and universalized duality or even multitude. His 1917 *The Code of a Herdsman* urges the leader or herdsman to resort to protective measures when leaving his lofty mountain retreat to stray among the wider populace: 'stagnant gasses from these Yahoosque and rotten herds are more dangerous [...]. See you are not caught in them without your mask'.²¹ When considering the literary talents of Shakespeare or Dickens, however, he later offers a more catholic definition of the herdsman: 'The stamp of what we choose to call "genius" [...] is precisely that the individual has externalized himself, has become purely an instrument, almost a common-property, in fact' (*CHC* 174). A second ideological tussle played out across Lewis's work is that of a mechanistic, materialist universe versus the wilful, interventionist artist. The former values are celebrated in *The Wild Body* (1927) and haunt the pages of *Tarr* (1918), causing the protagonist much anxiety as he endeavours to free his existence from the sloppy, chaotic instincts and physicality of a mechanistic existence. *Enemy of the Stars* also falls into this category, but can be said to represent Lewis's most developed engagement with a monist, materialist aesthetic, fashioning a Vorticist universe from its many standards and doctrines.

If Haeckel's philosophy proposes a visionary universe in which opposites are reconciled, then Lewis's *Enemy of the Stars* offers a fictional rendering of that same monist principle. For Haeckel and the Vorticist, life is a cosmic force in which man performs his brief, fragile destiny against a backdrop of infinite space and eternal time. Lewis and Scheerbart create fables of a monist universe that eschew the transcendentalist truth pursued by the Romantic individual. The stars of the Vorticist universe do not promise the agency of a benevolent divinity but rather establish a monist absence of differentiation between man and the wider universe. Lesabéndio may transcend his Pallasian identity but transfers his being to a form of astral matter. It is at this threshold of monist transformation and loss of self that Lewis pauses, leaving Arghol's metamorphosis as the subject of deliberation and affirmation within his protagonists' thoughts. Lewis places the artist or

man of genius at this threshold again in the 1922 edition of *The Tyro*. In the second volume of this post-war review, the 'Essay on the Objective of Plastic Art in Our Time' discusses man's limitations in relation to art. Again Lewis's images are of stellar space, matter, and opposites reconciled. He talks of us playing at being matter or 'placing ourselves somewhere behind the contradictions of matter and mind, where an identity [...] may more primitively exist' (TY2 26), and a Haeckelian interpretation is once again possible. A sense of impossible transcendentalist aspirations is repeated, but the violent and austere world of *Enemy of the Stars* is replaced by metaphors of play and games. In a passage in which Lewis is perhaps recalling the final pages of *Lesabéndio* he describes the artist '[e]ntering the forms of the mighty phenomena around us, and seeing how near [he] can get to being a river or a star, without actually *becoming* that. [...] The game consists in seeing how near you can get, without the sudden extinction and neutralisation that awaits you as matter, or as the machine' (TY2 26-27). However acutely aware of the material and mechanistic imperatives of a monist world-picture Lewis may be, in *Enemy of the Stars* and *The Tyro* he hesitates before an explicit Scheerbartian transfiguration, keeping alive the hope that 'although helpless in the face of the material world, we are in some way superior to it and independent of it' (TY2 26).

Notes

¹ Ernst Haeckel, *The Riddle of the Universe at the Close of the Nineteenth Century*, trans. Joseph McCabe (London: Watts, 1900). Henceforth cited as TRU.

² Ernst Haeckel, *Art Forms in Nature* [1904] (New York: Dover, 1974).

³ See for example Wilhelm Bölsche, *Haeckel: His Life and Work* (London: Watts, 1909).

⁴ Daniel Gasman, *The Scientific Origins of National Socialism* (New Brunswick and London: Transaction, 2007), 41.

⁵ Richard Weikart, *From Darwin to Hitler: Evolutionary Ethics, Eugenics and Racism in Germany* (London: Palgrave MacMillan, 2006); John Cornwell, 'Twisted Logic: The Thinkers admired, corrupted and opposed by the Nazis', *The Financial Times Supplement* (16 February 2013), 9.

⁶ Ernst Haeckel, *Anthropogenie [The Evolution of Man]* (Verlag von Wilhelm Engelmann: Jahr, 1874).

⁷ Toby Avard Foshay, 'Wyndham Lewis's Vorticist Metaphysic', *Ariel* 24. 2 (April 1993): 45-61.

- ⁸ Toby Myrthen, 'Wyndham Lewis: Between Nietzsche and Derrida', *English Studies in Canada* 16 (1990): 339-53.
- ⁹ Paul Edwards, *Wyndham Lewis: Painter and Writer* (New Haven and London: Yale University Press, 2000), 157 and 147.
- ¹⁰ Paul Scheerbart, *Lesabéndio: An Asteroid Novel*, translated by Christina Svendsen (Massachusetts: Wakefield Press, 2012). Hereafter cited parenthetically as Scheerbart, *LAN*.
- ¹¹ Paul Scheerbart, *Astrale Novelletten* (Leipzig: G. Muller Press, 1912).
- ¹² Paul Scheerbart, *Das Paradies: Die Heimat der Kunst* (Berlin: Der Verlag deutscher Phantasten, 1895).
- ¹³ Paul Scheerbart, *Glass Architecture* (1914), in *Glass Architecture/Alpine Architecture*, trans. James Palmes, introd. Dennis Sharp (London: November Books, 1972).
- ¹⁴ Kate Armond, 'Wyndham Lewis and the Parables of Expressionist Architecture', *Modernist Cultures* 9. 2 (forthcoming).
- ¹⁵ Paul Scheerbart, *The Perpetual Motion Machine: The Story of an Invention*, trans. Andrew Joron (Massachusetts: Wakefield Press, 2011).
- ¹⁶ Hugh Kenner, *Wyndham Lewis* (London: Methuen, 1954), 23.
- ¹⁷ J. Stebbins, 'A Photoelectric Study of Algol', *Astrophysical Journal* 53 (1921): 105-20; R. G. Aitken, 'Spectroscopic Binary Stars', *Publications of the Astronomical Society of the Pacific* 10. 60 (1898): 26-34.
- ¹⁸ Hermann Scheffauer, *The New Vision in the German Arts* (London: Ernst Benn, 1924).
- ¹⁹ *Ibid.*, 56-57.
- ²⁰ Ernst Haeckel, *Die Lebenswunder* (Stuttgart: Alfred Kröner, 1904).
- ²¹ Wyndham Lewis, *The Code of a Herdsman* (Reading: Able Printers, 1977), 7.