

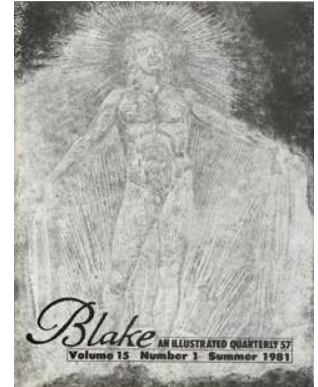
AN ILLUSTRATED QUARTERLY BLAKE

R E V I E W

Donald H. Reiman, ed., *The Garland Facsimiles of the Poetry of Erasmus Darwin*

Nelson Hilton

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REVIEWS

ROMANTIC CONTEXT: POETRY

Significant Minor Poetry 1789-1830

Printed in photo-facsimile in 128

volumes

Selected and Arranged by Donald H. Reiman

The Garland Facsimiles of the Poetry of James Montgomery

James Montgomery. *Prison Amusements and the Wanderer of Switzerland, Greenland and Abdallah, Verses to the Memory of the Late Richard Reynolds/The World Before the Flood, The Chimney Sweeper's Friend.*

Reviewed by Judy Page

Portrait of Montgomery from Vol IV of Holland & Everett's *Memoirs* from The Boston Public Library.

If you were asked to name the significant minor writers of the Romantic period, you would probably think of Southey or Crabbe or even John Clare before James Montgomery. And yet, in his day Montgomery was known in England and America as a poet, essayist, and humanitarian. His popular *Wanderer of Switzerland*, a tribute to the fight against French tyranny, inspired Byron to claim that it was "worth a thousand 'Lyrical Ballads' and at least fifty 'degraded epics.'"¹ Although Byron's enthusiasm was extravagant, the historical and social range of Montgomery's work and his relationship to the major English Romantics make him interesting to modern critics.

The Garland Publishing Company's five-volume facsimile edition allows us to view Montgomery's works in their original form, with the poet's prefaces and dedications, as well as with illustrations by contemporary engravers.² While British and American collections of Montgomery are available in most university libraries, the originals are rare. Furthermore, with facsimiles, we can appreciate the poems as books that, like the *Songs of Innocence and of Experience* and the *Lyrical Ballads*, were designed to have a certain impact on an audience.

The Garland reproductions do not necessarily represent the poems that Montgomery thought to be his best and collected in his *Poetical Works of James Montgomery* (1836). Nor do the volumes include

the works for which Montgomery is best remembered today, the Christian hymns and imitations of psalms.³ They emphasize instead Montgomery's relationship to the themes and commitments of the English Romantics: *Prison Amusements* are written when Montgomery is imprisoned for libel during the repressive 1790s; *The Wanderer of Switzerland* reflects disillusionment with the course of the French Revolution; *The West Indies* celebrates the abolition of the slave trade in England in 1807; and *The World Before the Flood* is Montgomery's self-consciously Miltonic poem.

Donald H. Reiman's editorial choices generally make sense from this perspective, although I wonder why the *Verses to the Memory of the Late Richard Reynolds* (1816) were reproduced with *The World Before the Flood* (1813), since the poems offer nothing but sincere praise for a pious Quaker from Bristol. Perhaps instead of these *Verses*, the series could have included *Pelican Island* (1827), Montgomery's last long poem and his only venture in blank verse. Also, the facsimiles, necessarily without modern editorial comments, would be more useful with new, separate introductions covering the material in each volume, instead of Reiman's general essay.⁴

Montgomery was born in Scotland in 1771, the son of Moravian missionaries. When he was six years old, his parents left for the West Indies after placing him in the Moravian School at Fulneck near

The Spectre of Darwin

Erasmus Darwin. *The Botanic Garden* (in 2 Vols.), *The Golden Age/The Temple of Nature*.

Reviewed by Nelson Hilton

"... couplets of shooting stars, lightning, the aurora borealis, fires at the earth's centre, animal incubation, volcanic mountains, calcined shells, glow worms, fire-flies, steam-engines, water engines, and 'flying chariots.'"¹

To consider Erasmus Darwin and Blake is to join the widening discussion over Blake's knowledge and use of Science, and the debate over the sources of his information. This discussion has thus far found its most extreme formulation in Donald Ault's important book, *Visionary Physics*. Ault's book, it must be said, leaves some incredulous readers with the impression that Blake compassed the *Principia*--and while that may be true, it is important for accepting Blake's active use of scientific ideas to realize that they were available through various and more popular sources. If, for example, one stands the scientifically acute Swedenborg on his head, as he did Newton, one ends up with a kind of basic Newtonianism again: core ideas can be disseminated through unlikely texts. Erasmus Darwin is similarly important for Blake studies--turned on his head, considered in the light of what he was attempting rather than the way it was realized, one could argue that Darwin is the English poet contemporary with Blake who most shares Blake's breadth of vision and his aim of ushering in the reign of "sweet science" (*PZ finis*).² Whether or not Blake actually works from some of Darwin's images is not the real issue here; what is important is that Darwin represents a conduit of the latest scientific infor-



mation easily available to Blake: "there is no better way," writes one historian of the period, "of ascertaining the state of science in 1789-90, or a more agreeable one, than by consulting Darwin's poems and his voluminous notes."³

We can assume that Blake read *The Loves of the Plants* (LP), as did nearly everyone else in 1789. It was published by Joseph Johnson (as were Darwin's succeeding works) though an arrangement which Fuseli evidently helped to bring about.⁴ Two years later, Blake undoubtedly had read the succeeding volume, *The Economy of Vegetation* (EV, dated 1791, probably published May 1792), since he engraved and in part designed several plates for the first edition (another followed in a later edition). These two titles represent, respectively, Part II (already in a third edition) and Part I of *The Botanic Garden*, the order of publication reflecting an astute marketing decision since the more "scientific" Part I proved less spectacularly popular than the sexual double-entendres of *The Loves of the Plants*. Given this history, it seems probable that Blake also read parts of *Zoonomia* (Z; 1794-96), the most significant of Darwin's mammoth prose works. Almost forgotten today, *Zoonomia* enjoyed wide republication and influence,⁵ being commonly linked with such better remembered radical works as *Political Justice* and *The Age of Reason*. Primarily as the result of a concerted reactionary attack,⁶ Darwin's reputation collapsed and his posthumous poem, *The Temple of Nature* (TN, 1802),⁷ met with little success. However,

as the most interesting and satisfying of Darwin's poems, and one again illustrated by Fuseli, it seems likely to have attracted Blake's attention.

Like Hayley, Darwin is little read today--poetically he seems to merit regard mostly as a quintessential example of the diction against which the "Preface" to *Lyrical Ballads* exclaims.⁸ But as encyclopedias--and all three poems, with their indexes, their very extensive Notes, and still more extensive Additional Notes force that comparison--they are fascinating. And for the poet who, as W. J. T. Mitchell reminds us, delights in encyclopedic form, Darwin would represent a benighted but sincere fellow-traveller, some of whose entries were worth studying. And with respect to the present viability of Blake's science-based imagery, it is significant that Darwin was in fact one of the most knowledgeable scientific intellects of the age,⁹ making reference to the latest theoretical and experimental work in his poems and notes (for example, the *OED* says the *The Botanic Garden* offers the first English appearance of "hydrogen"). Given such an accurate state-of-the-sciences, perhaps the Poetic Genius could extrapolate future developments ("What is now proved was once, only imagin'd"¹⁰). This discussion will offer some examples of how Blake *could* have built on images and concepts supplied by Darwin--images and concepts available elsewhere, to a regular reader of *Philosophical Transactions* for instance, but most accessible to us, and possibly to Blake, in their strange poetic and annotated guise.

I. PARENT POWER

The "beginning" of *The Four Zoas* may offer a place to start looking at Blake's "use" of Darwin. After the prayerful and oracular declarations, the poem announces, "Begin with Tharmas Parent power. darkning in the West" (4.5). We begin with Tharmas, evidently, because of an action--his darkning--and an attribution, "Parent power." To begin this way is then to begin at the beginning, but also to defer the question of origin: not the parent, but the power of parenting or generating is at stake. This suggests a curious reflection of a favorite, almost formulaic expression of Darwin's which appears first in the famous "Of Generation" section in *Zoonomia* and then twice in *The Temple of Nature*. In *Zoonomia* Darwin notes that Hume "places the powers of generation much above those of our boasted reason; and adds, that reason can only make a machine . . . but the power of generation makes the maker." Darwin goes on to support Hume's conclusion "that the world itself might have been generated rather than created, . . . increasing by the activity of its inherent principles rather than by a sudden evolution of the whole by the Almighty fiat." Darwin then stops to interject, "--What a magnificent idea of the infinite power of THE GREAT ARCHITECT! THE CAUSE OF CAUSES! PARENT OF PARENTS! ENS ENTIUM!"¹¹ In *The Temple of Nature* nearly the same words characterize the source of "the immutable laws impressed on matter," the "amazing powers . . . originally impressed on matter and spirit by the great Parent of Parents! Cause of Causes! Ens Entium!"¹² "Enion O Enion" says the Parent power in its next line, and we are reminded of one posited derivation for the name of the "Aged Mother."

Also relevant in this context is Darwin's notion of the origin of life from a primordial muscular fibre; this argument is detailed in *The Temple of Nature*, which tells that "Imperious Man" "Arose from rudiments of form and sense, / An embryon point, or microscopic ens!" (I.313-14). A note explains "that all vegetables and animals arose from such a small beginning, as a living point or living fibre." Fibre is, one remembers, one of Blake's pervasive thematic conceptions: Tharmas asks Enion why "every little fibre" of his soul is to be examined, and soon after that the Parent power falls--"he sunk down." Directly following:

His spectre issuing from his feet in flames of fire
In gnawing pain drawn out by her lovd fingers
every nerve
She counted. every vein & lacteal threading
them. . . . (5.15-17)

Here the syntax indicates that his spectre consists--in part--of the fibres of nerve, vein, and lacteal which Enion weaves into "a form of vegetation": "She drew the Spectre forth from Tharmas in her shining loom / Of vegetation" (6.1-2). Blake would not have been the first to connect the primordial fibre (line) and the Parent power--shortly after *Zoonomia* was published, Richard Edgeworth wrote the author to say that the attempted deistic cover-up did not deceive him: "Your Ens Entium is the same as your living filament--your God of God!" (cited in King-Hele, p. 251). For Blake also they are the same: "this Spectre of Tharmas / Is Eternal Death;" the present embodiment, perhaps, of the Darwinian powers of life that "seize, digest, secrete,--dispense / The bliss of Being to the vital Ens" (*TN* I.149-50, cf. 446). The creation of the circle of Destiny, the Ulro, the system of generation is Blake's beginning, the darkening of the Parent power which underlies Darwin's spurious homage to an apparent "Parent of Parents" and governs his self-confident vision of comprehensible, ultimate Nature.

A further example may serve to characterize the spectral presence of Darwin. In Canto III of *The Temple of Nature*:

"The GIANT FORM on Nature's centre stands,
And waves in ether his unnumber'd hands;
Whirls the bright planets in their silver
spheres,
And the vast sun round other systems steers;
Till the last trump amid the thunder's roar
Sound the dread Sentence "TIME SHALL BE NO MORE!"
(385-90)

Where in "Night the First" Blake reached back to begin before Darwin's beginning, in "Night the Ninth" his ending commences where Darwin's leaves off:

Los his vegetable hands
Outstretchd his right hand branching out in
fibrous Strength
Siedz the Sun. His left hand like dark roots
coverd the moon
And tore them down cracking the heavens from
immense to immense

Then fell the fire of Eternity with loud &
shrill
Sound of loud Trumpet thundering (117.6-11)

This first in a series of incomplete revelations shows Los, Blake's "giant form," trying to engineer a Darwinian apocalypse--his vegetable hands representing the admittedly grand extension of a vegetable imagination ("Thus all the suns, and the planets, which circle round them, may again sink into one central chaos; and may again by explosions produce a new world; which in process of time may resemble the present one, and at length undergo the same catastrophe! these great events may be the result of the immutable laws impressed on matter by the Great Cause of Causes, Parent of Parents, Ens Entium!" [TN IV.453n.]). Los' dramatic action, after all, comes from being "Terrified at Non Existence / For such they deemd the death of the body." Natural Religion or Deistic Science seizes, *orders* the heavens out of a fear of Non-Existence, the state of "the Spirit" (cf. 117.3-4).¹³

These tentative illustrations of "influence" (or perhaps simply, "relevant overtone coloring") suggest two aspects of Darwin's spectral presence in Blake. First, that Blake was an appreciative and attentive reader of Darwin; and second, that this very closeness made Darwin all the more suspect for him, and so only "spectrally" present. For Darwin had done--successfully, in the popular eye--what Blake wanted to do. With a somewhat analogous scope of vision¹⁵ and a somewhat analogous sense of the epistemic break reflected by the "scientific method," Darwin created a system all the more troubling to Blake's imagination.¹⁶ Where Darwin hoped "to inlist Imagination under the banner of Science" (BG, Advertisement), Blake strives for the reverse, under the banner of "Sweet Science."

II. GEOPHYSICS

The power and appeal of Darwin at his best are evident in the following lines from *The Economy of Vegetation*, about which Walpole wrote a friend in May 1792, "the twelve verses that by miracle describe and comprehend the creation of the universe out of chaos, are in my opinion the most sublime passage in any author. . . .":¹⁷

--LET THERE BE LIGHT!" proclaim'd the ALMIGHTY LORD,
Astonish'd Chaos heard the potent word;--
Through all his realms the kindling Ether runs,
And the mass starts into a million suns;
Earths round each sun with quick explosions
burst,
And second planets issue from the first;
Bend, as they journey with projectile force,
In bright ellipses their reluctant course;
Orbs wheel in orbs, round centres centres roll,
And form, selfbalanced, one revolving Whole.
--Onward they move amid their bright abode,
Space without bound, THE BOSOM OF THEIR GOD!
(I.103-14)

The Miltonic description, "self-balanced"--characteristically expanded to refer to an entire stellar

system rather than just the Earth--perhaps enters into Blake's various usages of the image, but far more significant is Darwin's idea of planets born by explosions: a note adds, "If these innumerable and immense *suns* thus *rising* out of Chaos are supposed to have thrown out their attendant planets by new explosions, as they ascended; and those their respective satellites, filling in a moment the immensity of space with light and motion, a grander idea cannot be conceived by the mind of man" (*italics added*).

But three years later, Chapter I of *The Book of Urizen* opens with "Lo, a shadow of horror is risen / In Eternity! . . . Times on times he divided." The grander idea in the mind of Blake was first suggested in David Worrall's important and detailed discussion of Blake's adaption of Darwin's geophysical speculations--the second section of his "William Blake and Erasmus Darwin's *Botanic Garden*"¹⁸ is essential reading for any student of Blake. Darwin's idea of cosmogenic explosions involves volcanos and earthquakes: "We can have no idea of a natural power, which could project a Sun out of Chaos, except by comparing it to the explosions or earthquakes owing to the sudden evolution of aqueous or of other more elastic vapours; of the power of which under immeasurable degrees of heat, and compression, we are yet ignorant" (EV I.105n.). A note on "Solar Volcanos" suggests that "cavities are made in the sun's body by a process similar to our Earthquakes" (EV Add. N. XV), and, correspondingly, as the earth's volcanos show its center to consist of "a large mass of burning lava . . . a second sun,"¹⁹ "the first earthquakes, which produced immense changes in the globe, must have been occasioned by central fires" (EV Add. N. VI). So in *The French Revolution*, already beginning Blake's correspondence between head and (astronomical) orb, the King of France appears with "his forehead . . . in affliction, / Like the central fire" (79-80). A striking instance of geophysical dynamic was the creation of the moon:

And Earth's hugh sphere exploding burst in
twain.--
GNOMES! how you gazed! when from her wounded
side
Where now the South-Sea heaves its waste of
tide,
Rose on swift wheels the MOON'S refulgent car
Circling the solar orb, a sister-star
(EV II.76-80)

Blake refers to this image several times, first, as Worrall observes, in *The French Revolution* when Aumont "compares and dates man's first *enslavement* to changes in the heavens" [*italics added*]: "the terrible sun clos'd in an orb, and the moon / Rent from the nations" (211-12). In *America* the "close hall of counsel"--the skull is one referent (cf. *Europe* 10.25ff.)--was "built when the moon shot forth, / In that dread night when Urizen call'd the stars round his feet."²⁰ One of the most intriguing developments occurs in *The Book of Urizen*, where Darwin's cosmological dynamic seems to inform both Urizen, "rent from [the] side" of Los, "By earthquakes riv'n, belching sullen fires" (6.4, 10.4); and Los, "His bosom earthquak'd with sighs" (13.49) and then dividing to produce the first female form--all on a stage of the Void, "the endless Abyss of space"

(15.10). As R. E. Simmons first noted, these passages--which result in Urizen as a "clod of clay" and the globe of blood or incipient female "Wand'ring wide on the bosom of night"--suggest "a geophysical theory of the origin of the earth as a chunk of matter thrown off by the sun."²¹ The developing analogy can be pressed even further, for, as Darwin illustrates, gravity was commonly imaged as a chain: "Chain'd to one centre whir'l'd the kindred spheres" (EV II.91). So, directly after being rent from the side of Los (/sol), Urizen is chained up--in "chains of the mind" to be sure, but also gravity (that serious matter). This points to the ontological relation between present existence, enslaved, and "creation," for in Eternity "Earth was not: nor globes of attraction" (BU 3.36). "Creation" was the fall from energy/imagination into matter and its accompanying systems of gravity and space-time, a conception which has roots in Swedenborg's science-based fantasy of the "spiritual" universe mirrored by our tangible one. The important point, as Worrall concludes, is that "After *The French Revolution*, Darwin's geophysical speculations are quickly absorbed into the expanding synthesis of Albion's Angel, Urizen, and Los, where the scientific version of the relations of chaos, sun, and earth are freely interchanged" (p. 417); this opens the way to one key analogy guiding the cosmology of Blake's "cosmic" myth, an analogy which should somewhat refocus our sense of Blake's concerns. Los is, on *one* level, the actual sun; Urizen the Earth; Enitharmon the moon.²² The most far-reaching concrete analogies are set up and then spiritualized, so that Los includes the total imagistic potential of the sun and so forth.

III. BIOGENETICS

Another recent critic finds Darwin behind the "biogenetic creation" in *The Book of Urizen*. Unfortunately, D. C. Leonard²³ uses relevant quotations to support forced relations. Darwin, to repeat, is spectrally present in Blake--his importance lies in the compendium of scientific imagery he offered rather than in massive direct influence. Consider, for example, as Leonard does, Darwin's memorable lines on embryonic development as exemplified in the crocodile. The passage itself, significantly, is introduced to establish a comparison with seed development, the subject of preceeding lines. To suggest the less specific but more pervasive nature of Darwin's "influence" on Blake, we must look at the movement of these eighty-some lines as a whole, for their real (and Blakean) burden is a vision of interpenetrating, interacting correspondences.

The Botanic Muse opens the subject by addressing her "Sylphs,"²⁴

"SYLPHS! as you hover on ethereal wing,
Brood the green children of parturient Spring!--
Where in their bursting cells my Embryons rest,
I charge you guard the vegetable nest;
Count with nice eye the myriad SEEDS, that swell
Each vaulted womb of husk, or pod, or shell;
Feed with sweet juices, clothe with downy hair,
Or hang, inshrined, their little orbs in air."

The little orbs hanging in air suggest stars and,

indeed, the following four lines make the comparison explicit:

"So, late decry'd by HERSCHEL'S piercing
sight,
Hang the bright squadrons of the twinkling Night;
Ten thousand marshall'd stars, a silver zone,
Effuse their bended lustres round her throne;"
(EV IV.351-62)

Here, then, we see stars as vegetable seeds or pods, hanging in a tracery of vegetation, perhaps like those in Blake's first illustration to *Il Penseroso*. The star-seed-orbs as "husk, or pod, or shell" suggests how *The Four Zoas* can imagine "the stars thresh'd from their husks" (134.1);²⁵ while the "sweet juices" feeding the seeds suggest an analogy to some stellar, etherial nutrient. The comparison of seeds to stars leads to a digression:

Flowers of the sky! ye too to age must yield,
Frail as your silken sisters of the field!
Star after star from Heaven's high arch shall
rush,
Suns sink on suns, and systems systems crush,
Headlong, extinct, to one dark centre fall,
And Death and Night and Chaos mingle all!
--Till o'er the wreck, emerging from the storm,
Immortal NATURE lifts her changeeful form,
Mounts from her funeral pyre on wings of flame,
And soars and shines, another and the same.
(IV.371-80)

A note refers us to Herschel's conclusion "that the nebulae or constellations of fixed stars are approaching each other, and must finally coalesce in one mass." The "Flame" of Nature's wings reappears as the lines following return to the discussion of seeds:

"Lo! on each SEED within its slender rind,
Life's golden threads in endless circles wind;
Maze within maze the lucid webs are roll'd,
And, as they burst, the living flame unfold.
The pulpy acorn, ere it swells, contains
The Oak's vast branches in its milky veins;
Each ravel'd bud, fine film, and fibre-line
Traced with nice pencil on the small design."
(IV.381-88)

The "living flame" is vegetation, an image frequent enough in Blake's illustrations. More than that, it reflects organic energy, the vital power that haunts Darwin--it is but a shift of focus to see this power as spiritual or mental flames. The image of "Life's golden threads . . . Maze within maze" picks up an earlier image of the body's circulatory system, which "O'er . . . tissue'd membrane spreads / In living net-work all its branching threads; / Maze within maze;" just as, in turn, "So shoot the Spider-broods at breezy dawn / Their glittering net-work o'er the autumnal lawn" (EV III.531-33, 555-56). The discussion of seeds culminates in a picture of Earth, "the mighty ball":

And the GREAT SEED evolves, disclosing ALL:
LIFE buds or breathes from Indus to the Poles,
And the vast surface kindles, as it rolls!
(EV IV.406-8)

It is not far to the "globe of life blood," the seed of Nature, the first "female form" (BU 18.1, 7). These sorts of associations help to gloss some of the multi-dimensions of creation in *Urizen*:

. . . A Web dark & cold, throughout all
The tormented element stretch'd
From the sorrows of Urizens soul
And the Web is a Female in embryo.
None could break the Web, no wings of fire.
(25.15-19)

Nature's "wings of flame" cannot break the net of its own laws. Dampened by the melancholy of natural abstraction, these flames of nature or natural inspiration are merely "another and the same," or, as Blake saw the process, "the Ashes of Mystery" animating again, "as of old so now anew began / Babylon again in Infancy Call'd Natural Religion" (FZ VIII, 111.22-24).

Darwin's discussion of seeds now moves to the conclusion which interested D. C. Leonard:

While in bright veins the silvery Sap ascends,
And reflux blood in milky eddies bends;
While, spread in air, the leaves respiring play,
Or drink the golden quintessence of day.
--So from his shell on Delta's shower-less isle
Burst into life the Monster of the Nile;
First in translucent lymph with cobweb-threads
The Brain's fine floating tissue swells, and
spreads;
Nerve after nerve the glistening spine descends,
The red Heart dances, the Aorta bends;
Through each new gland the purple current glides,
New veins meandering drink the reflux tides;
(IV.419-30)

Leonard's analogy to the first four lines of "the Monster's" creation (BU 10.19-23)²⁶ seems too groundless to bear repeating; nonetheless, every reader will probably sense something Blake-like at work. Here again, what seem to reverberate are words and minute images, rather than larger patterns or trains of images (Blake metonymizes rather than metaphorizes Darwin). Through the use of "cobweb-threads" and "tissue," Darwin's image of the brain recalls the seed and its "lucid webs" and the body's "tissued membrane" with its "living net-work" similar to that made by the Spider. So *The Book of Urizen*'s development of Urizen's "spiders web," the "Female in embryo," is not altogether without precedent:

8. So twisted the cords, & so knotted
The meshes: twisted like to the human brain
9. And all call'd it, The Net of Religion.
(25.20-22)

The brain, *Milton* says, "is the Seat / Of Satan in its Webs" (20.37-38). Darwin's description of "the glistening spine descends" is for Leonard a picture of Urizen

In a horrible dreamful slumber;
Like the linked infernal chain;
A vast Spine writh'd in torment
(10.35-37)

This association serves to remind us that Blake's vision has a far greater (and more compressed)

complexity than Darwin's: Urizen's "geophysical" chain of gravity is doubled by a "biogenetic" spine; both are, inferentially, serpentine or worm-like, and both the result of "horrible dreamful slumber"--as was, perhaps, Darwin's entire vision for Blake.²⁷ Drawing on Albert S. Roe's discussion of "The Fertilization of Egypt,"²⁸ which Blake engraved and in part designed for *The Economy of Vegetation*, Leonard confidently asserts the identity of this "Monster of the Nile" [crocodile] with Darwin's Nile River God and hence Blake's "Egyptian Monster, Urizen."

IV. LIVING LINES

Leonard also reminds us of the central importance and wide applicability of Darwin's proposal "that all warm-blooded animals have arisen from one living filament, which THE FIRST GREAT CAUSE endued with animality" (Z 39.4, p. 505), relating it to the "fibrous" branching of the globe of life blood, whose "fibres or filaments" Leonard sees as "the life roots of creation." More interesting, though equally lacking in credible support, is Leonard's intuitive analogy linking Orc in his initial, simple, form of a worm to Darwin's primordial filament.

. . . Enitharmon, sick,
Felt a Worm within her womb.

4. Yet helpless it lay like a Worm
In the trembling womb
To be moulded into existence

5. All day the worm lay on her bosom
All night within her womb
The worm lay till it grew to a serpent
(BU 19.19-26)

This may be seen, in part, as a description of the penis in the vagina and also, evidently, as the male seed (already known to consist of worm-like forms²⁹). Leonard and also Carmen S. Kreiter³⁰ develop the idea that the worm's change to "Many forms of fish, bird & beast" which "Brought forth an Infant form" suggests embryonic "evolutionary" recapitulation. Of equal interest is the development of "the worm" into Blake's general silk-worm imagery, and the obliquely related idea of some form of "line" at the source of creation. This idea might be summarized as follows:

(chain = spine = serpent/worm = fibre) = line
(= speech/writing [lines of text])

For Darwin, the idea of the first filament/fibre /line seems to have accompanied some sort of imaginative revelation, since while lines pass unremarked in *The Botanic Garden*, after the discussions of fibres in *Zoonomia* they come to prominence in *The Temple of Nature*. A reference to spiders in the earlier work evokes a tag from Pope while hinting, as mentioned above, at an analogy between the spider's "glittering net-work" and the body's "living net-work":³¹

So shoot the Spider-broods at breezy dawn
Their glittering net-work o'er the autumnal
lawn;
From blade to blade connect with cordage fine

The unbending grass, and live along the line;
(EV III.555-58)

The branching threads become living lineaments of art in a revision of the formula as it appears in *The Temple of Nature*, a passage which might remind the reader of Los's sculpted halls (J 16.61ff.):

Unnumber'd ailes connect unnumber'd halls,
And sacred symbols crowd the pictur'd walls;
With pencil rude forgotten days design,
And arts, or empires, live in every line.
(I.85-88)

But the real burden of *The Temple of Nature*--versifying what had already been worked out at length in *Zoonomia*--appears in passages such as the following:

ATTRACTION next, as earth or air subsides,
The ponderous atoms from the light divides,
Approaching parts with quick embrace combines,
Swells into spheres, and lengthens into lines.
Last, as fine goads the gluten-threads excite,
Cords grapple cords, and webs with webs unite:
And quick CONTRACTION with ethereal flame
Lights into life the fibre-woven frame.--
Hence without parent by spontaneous birth
Rise the first specks of animated earth;
From Nature's womb the plant or insect swims,
And buds or breathes, with microscopic limbs.
(I.239-53)

Given lines, the whole fabric/tissue/text of creation follows, woven in the looms of nature; so *The Loves of the Plants* tells of the "Inventress of the Woof, fair LINA" (II.67)--cotton's appropriate Latin name--in whose loom is worked "the fibre-line" (II.78; lines become linen). Among the primal microscopic forms of life are "Self-moving lines" (TN I.286), while in seeds, "The Reproductions of the living Ens" commence as "the living fibre shoots" and "new embryo fibrils . . . form the living line" (EV II.63, 65, 79-80). Out of such reproductive techniques "heaven born STORGE weaves the social chain;"³² and "soft affections live along the line," for "Birth after birth the line unchanging runs / And fathers live transmitted in their sons" (TN II.92, 94, 107-08). Darwin's note on "Imagination's power" over reproduction says, "It is not to be understood, that the first living fibres, are produced by imagination, with any similarity of form to the future animal, but with appetencies or propensities, which shall produce . . . corresponding with the imagination of the father" (II.118n.). For Blake, imagination is the father of all reproduction, the creator (not reproducer) of the line which (as for Darwin) is only "tinctured" in the loom/womb textile machinery of the mother:

And first he drew a line upon the walls of
shining heaven
And Enitharmon tinctured it with beams of
blushing love
It remain'd permanent a lovely form inspir'd
divinely human
Dividing into just proportions Los unwearied
labour'd
The immortal lines upon the heavens
(FZ VIIa 90.35-39)

This offers a more encompassing vision of Darwin's "chemic arts" which "disclosed in pictured lines, / Liv'd to mankind" (EV I.367-68); Darwin's line is finally the agent and expression of imitation (artistic or "genetic") rather than imagination.³³

The Temple of Nature also presents the living-line or fibre as the basic unit of animation because of its power of contraction. A note to the lengthy passage quoted above says that "The power of contraction, which exists in organized bodies and distinguishes life from inanimation, appears to consist of an ethereal fluid which resides in the brain and nerves of living bodies, and is expended in the act of shortening their fibres" (I.245n.). A power of expansion, which Darwin nowhere posits (expansion being the result of another contraction), was already part of Blake's conception of Eternity: "The will of the Immortal expanded / Or contracted his all flexible senses" (BU 3.37-38). Eternity, evidently, is non-linear: the pure state, perhaps, of the "etherial fluid" or "spirit of animation" (Z, p. 30).³⁴ Given the heritage of Locke and Newton (in the "Questions" appended to *The Opticks*), and particularly Hartley (who greatly influences Darwin), our textured universe of lines and fibres testifies to the impossibility of Edenic perception; for Darwin, indeed, "The word *idea* . . . is defined as a contraction, or motion, or configuration, of the fibres" (Z, p. 11). The lines of thought, in turn, become chains, "links of the chain of fibrous actions" (TN Add. N. VII):

Last in thick swarms ASSOCIATIONS spring,
Thoughts join to thoughts, to motions motions
cling;
Whence in long trains of catenation flow
Imagined joy, and voluntary woe.
(TN I.277-80)

Individual words reflect "In parted links the long ideal trains" and are, furthermore, "Chain'd down in characters" to give "to sight the evanescent sound" (TN III.398, IV.266, 268). Darwin himself realizes one now much-discussed consequence of this imprisonment: "the acquirement of different languages in their infancy may affect the modes of thinking and reasoning of whole nations, or of different classes of society; as the words of them do not accurately suggest the same ideas, or parts of ideal trains; a circumstance which has not been sufficiently analysed" (TN IV.398n.).

The silk-worm occupies an interesting position in this universe of lines: a kind of "living line," it cocoons itself with self-produced line, only to burst its "well-woven house of silk" (TN Add. N. IX) after transformation. Darwin's images also serve to remind us that "worm" was a standard term for "silk-worm," a convention which has ramifications for Blake's references:

The Silk-Worm broods in countless tribes above
Crop the green treasure, uniform'd of love;
Erewhile the changeful worm with circling head
Weaves the nice curtains of his silken bed;
Web within web involves his larva form,
Alike secured from sunshine and from storm;
For twelve long days He dreams of blossom'd

groves,
 Untasted honey, and ideal loves;
 Wakes from his trance, alarm'd with young
 Desire,
 Finds his new sex, and feels ecstatic fire;
 (TN II.295-304)

The rationale for this is "sexual reproduction only, which seems to have been the chef-d'oeuvre, or capital work of nature;³⁵ as appears by the wonderful transformation of leaf-eating caterpillars into honey-eating moths and butterflies, apparently for the sole purpose of the formation of sexual organs, as in the silk-worm, which takes no food after its transformation, but propagates its species and dies" (TN Add. N. VIII). The silk-worm's change raises in particular the question of instinct:

Conscious of change the Silkworm-Nymphs begin
 Attach'd to leaves their gluten-threads to spin;
 Then round and round they weave with circling
 heads
 Sphere within Sphere, and form their silken beds.
 --Say, did these fine volitions first commence
 From clear ideas of the tangent sense;
 From sires to sons by imitation caught,
 Or in dumb language by tradition taught?
 Or did they rise in some primeval site
 Of larva gnat, or microscopic mite;
 (TN III.419-28).

No answer is suggested here, but Darwin's discussion of the Portland Vase in *The Economy of Vegetation* pointed the way to an analogy that might have interested Blake. Instinct, the "dumb language," and the "spirit of imagination" exist outside the immediate organization of lines to effect the transformation of line into expanded plenum: each parted linear link of word is also like a worm, waiting for its wings.

V. THE PORTLAND VASE

The famous Barberini Vase, which had been brought to England eighteen months previously, was acquired by the Duke of Portland in June 1786. A few days later it was loaned to Josiah Wedgwood, who had long desired to create some copies of it. Wedgwood was another close friend of Darwin's: their families were to be linked by marriage, and Wedgwood's remarkable industrial pottery, "Etruria," was so named by Darwin because he thought that Wedgwood had rediscovered a kind of ceramic painting previously known only to the ancient Etruscans. Darwin no doubt studied the original and in 1790 was sent the first copy for approval. Against this background it is no surprise to see a slight reference to the vase in *The Economy of Vegetation*--

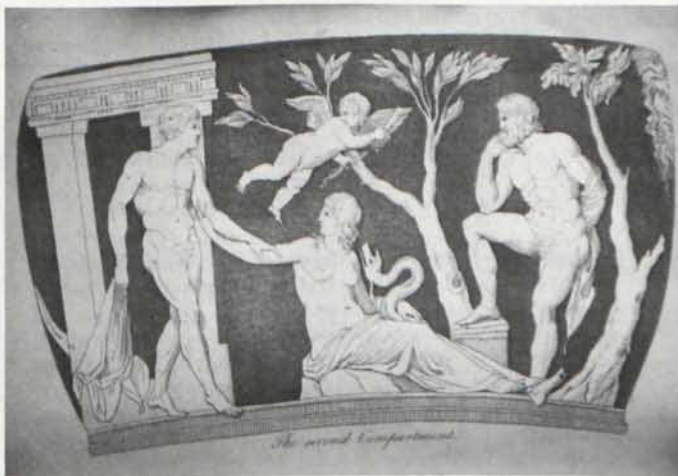
Or bid Mortality rejoice and mourn
 O'er the fine forms in Portland's mystic urn
 (II.319-20)

--occasion several different views of the vase (illus. 1-4) and a lengthy "Additional Note" whose explanation of the scenes on the vase "is still regarded as the best."³⁶ The views were evidently copied and engraved by Blake, who--judging from

Johnson's letter to Darwin of 23 July 1791--was for a time entrusted with the vase itself.³⁷ Darwin's remarks would in any event have interested any student of Bryant and the other mythologists, for, according to Darwin, the vase "represents what in antient times engaged the attention of philosophers, poets, and heros, I mean a part of the Eleusinian mysteries" (Add. N. XXII). Darwin's deep interest in these matters emerges more strongly in the "Preface" to *The Temple of Nature* where he writes that "in the mysteries the philosophy of the works of Nature . . . are believed to have been taught by allegoric scenery . . . which gave rise to the machinery of this poem." The scenes on the vase he describes as "the first part of this scenery," representing "Death, and the destruction of all things." In *The Economy of Vegetation*, Darwin sees the central figure, a female in a dying attitude (represented by the inverted torch in her hand, "an antient emblem of extinguished life"), as "an hieroglyphic of the Eleusinian emblem of MORTAL LIFE, that is, the lethu, or death, mentioned by Virgil amongst the terrible things exhibited at the beginning of the mysteries." Another figure, "The MANES or GHOST appears lingering and fearful, and wishes to drag after him a part of his mortal garment, which however adheres to the side of the portal through which he has passed." Such images



- 1 The Portland Vase. Courtesy of Robert Essick.
- 2 The First Compartment. Courtesy of Robert Essick.
- 3 The Second Compartment. Courtesy of Robert Essick.
- 4 The Handles and Bottom of the Vase. Courtesy of Robert Essick.



perhaps helped to point Blake toward his later use of body-as-garment. And while there are many sources, conscious and not, for Blake's varied and multivalent serpent images, the following passage must have occasioned some interest: "A little lower down in the group the manes or ghost is received by a beautiful female, a symbol of IMMORTAL LIFE. This is evinced by her fondling between her knees a large and playful serpent, which from its annually renewing its external skin has from great antiquity . . . been esteemed an emblem of renovated youth." This may suggest another interpretation for the mysterious design in *America*, pl. 14, where a would-be scholar prays to a seated woman with a fondled serpent between her spread knees. The "death-preaching sibyl" seen by David Erdman is an academic projection --the serpent at the bottom of the plate ejaculates those same flames from which the student, as Orc or "renovated youth" in the design of pl. 10, could emerge. So also the serpent of pl. 11 ridden by children and reined by a young girl could offer extremely positive associations: in the text of pl. 15, the female spirits "glowing with the lusts of youth . . . feel the nerves of youth renew. and desires of ancient times." As the same design of the ridden serpent appears at the end of *The 1*, these same associations may affect the interpretation and dating of that final plate, already generally considered as a later addition to the poem.

But the most interesting explanation comes towards the close of the note; it offers information available elsewhere, but in succinct and memorable form summarizes an emblem essential for considering, *inter alia*, the title page of *Jerusalem*:

The Psyche of the A Egyptians was one of their most favorite emblems, and represented the soul, or a future life; it was originally no other than the aurelia, or butterfly, but in after times was represented by a lovely female child with the beautiful wings of that insect. The aurelia, after its first stage as an eruca or caterpillar, lies for a season in a manner dead, and is inclosed in a sort of coffin, in this state of darkness it remains all the winter, but at the return of spring it bursts its bonds and comes out with a new life, and in the most beautiful attire. The A Egyptians thought this a very proper picture of the soul of man, and of the immortality to which it aspired. But as this was all owing to divine Love, of which EROS was an emblem, we find this person frequently introduced as a concomitant of the soul in general of Psyche. (Bryant's Mythol. Vol. II. p. 386).

This rich description could serve to gloss many of Blake's images which point to the cocoon or chrysalis stage of lepidopteral metamorphosis: the couch of death, covering veil, golden bed.³⁸ "In Eden [Beulah, del.] Females sleep the winter in soft silken veils / Woven by their own hands to hide them in the darksome grave" (*PZ* I 5.1-2). The female forms weave their veils "in sweet raptured trance" of sexual organization, the "dreams of bliss" of the sleepers of Beulah--reminding us that in the Blakean *aufhebung* of the image Darwin's aurelia becomes Blake's human larva. Time itself is a cocoon:

"every Moment has a Couch of gold for soft repose" (M 28.45ff). The sleeping (time=sleeping) "for a season in a manner dead" is only prologue to the main event which interested Blake, pupation or "bursting": "Graves . . . bursting with their births of immortality" (VLJ, E 543). Such references assume a formulaic dimension, emphasizing--curiously--the "bottom" of the grave/couch/cocoon, as when multitudes of warlike sons "Burst the bottoms of the Graves & Funeral Arks of Beulah" (J 89.6, et al.). This bursting consistently represents a kind of de-evolution or birth (as *descent*, perhaps) into cruel "male forms without female counterparts or Emanations" (EZ VIIa 85.19). The dynamic is perhaps similar to that of "The Crystal Cabinet"--the bursting of which suggests that the cabinet is in part a chrysalis--where the male gets wrapped up in Beulah-love, but by intellectually striving to seize its inmost form breaks the intended pattern of his development and falls back to the weeping babe stage. For all Blake's emphasis on mental fight and individual exertion, there is a contrasting faith in a kind of spiritual "genetic programming," a saving "inmost form"--"this was all owing to divine Love," to use Darwin's words. But Blake reverses Darwin's conception of emblem and actuality.

VI. ODDS AND SEXUAL ENDS

The idea of "emblem," evident in Darwin's interest in the Portland Vase, appears more directly in a footnote which Albert S. Roe also finds "suggestive

with reference to Blake." Commenting on "the holy Halo" in the first canto of *The Economy of Vegetation*, Darwin writes:

I believe it is not known with certainty at what time the painters first introduced the luminous circle round the head to import a Saint or holy person. It is now become a symbolic language of painting, and it is much to be wished that this kind of hieroglyphic character was more frequent in that art; as it is much wanted to render historic pictures both more intelligible, and more sublime; and why should not painting as well as poetry express itself in a metaphor, or in indistinct allegory? A truly great modern painter lately endeavored to enlarge the sphere of pictorial language, by putting a demon behind the pillow of a wicked man on his death bed. Which unfortunately the cold criticism of the present day has depreciated; and thus barred perhaps the only road to further improvement in this science.

(EV I.358n.)³⁹

5 "The Tornado." Courtesy of Robert Essick.

6 Table of Contents for *The Temple of Nature*, Canto IV, "Of Good and Evil." Repr. from Scholar Press facsimile.



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Darwin's off-hand characterization of painting as a science which can improve through experiments in expression would probably have elicited Blake's interest:⁴⁰ the serpents of *America*, for example, seem to offer a "kind of hieroglyphic character" in their part of that work's metaphor or "indistinct allegory."

Striking also is Darwin's spectre-like conception of

The Demon, Jealousy, [who] with Gorgon frown
Blasts the sweet flowers of Pleasure not his own,
Rolls his wild eyes, and through the shuddering
grove
Pursues the steps of unsuspecting Love
(TN II.307-10)⁴¹

For Darwin, Jealousy is sexual strife, and so an expression of vital energy--here he is not far from a foreshadowing of natural selection. He notes that the horns of stags "have therefore been formed for the purpose of combatting other stags for the exclusive possession of the females, who are observed, like the ladies in the times of chivalry, to attend the car of the victor" (TN II.321n.). So Darwin concludes this theme with a reference to the "Knight on Knight, recorded in romance" who looked to the admiring eyes of the female bands, "Bow'd to the Beauty, and receiv'd her smiles" (TN II.333). Faint reward indeed, but perhaps remembered by Blake in the dark conception of Vala-centered strife through *Jerusalem*, Chapter 3:

This is no warbling brook, nor shadow of a
mirtle tree:
But blood and wounds and dismal cries, and
shadows of the oaks:
And hearts laid open to the light, by the broad
grizly sword:
And bowels hid in hammerd steel rip'd quivering
on the ground.
Call forth thy smiles of soft deceit: call
forth thy cloudy tears:
We hear thy sighs in trumpets shrill when morn
shall blood renew.
(J 65.50-55)

Given "the importance of the sexual love which Darwin believes to be the most highly developed kind of love" (Hassler, p. 84), it is not surprising that Darwin turns from sexual strife to the domestic "triumph of despotic LOVE"; even "the enamour'd Flowers":

Breath their soft sighs from each enchanted
grove,
And hail THE DEITIES OF SEXUAL LOVE.
(TN II.409-10)

But for Blake such deification is woven to dreams, and "Sexes must vanish & cease / To be, when Albion arises from his dread repose" (J 92.13-14). This may serve as Blake's final response to what must have been the most compelling aspect of Darwin's vision⁴² --a positive delight in sexual organization that had troubled Blake as far back as *The Book of Thel*.⁴³

Darwin's vision of the sexual universe reaches heights of modern fascination in his discussion in verse and footnote concerning curved forms, or "IDEAL BEAUTY." "If the wide eye the wavy lawns explores," or "Hills, whose green sides with soft protuberance rise, / Or the blue concave of the vaulted skies,"--anytime the eye sees lines which reflect "the nice curves, which swell the female breast":

The countless joys the tender Mother pours
Round the soft cradle of our infant hours,
In lively trains of unextinct delight
Rise in our bosoms *recognized by sight*;
Fond Fancy's eye recalls the form divine,
And TASTE sits smiling upon Beauty's shrine.
(TN III.227-32)

Darwin's attraction to this idea is evident in the catalogue of poetic paraphrases he finds for women's breasts: "velvet orbs," "milky fount," "the Paphian shrine," "pearly orbs," "salubrious fount," "the perfect form." Indeed, considering the opening request in *The Temple of Nature* that the "mystic veil withdraw" from the Goddess in order to "Charm after charm . . . display / And give the GODDESS to adoring day!" and the echoing closing image of the poem, it is not too much to say that for Darwin the female bosom equals "TRUTH DIVINE!": Urania (the reader's guide),

Thrice to the GODDESS bows with solemn pause,
With trembling awe the mystic veil withdraws,
And, meekly kneeling on the gorgeous shrine,
Lifts her ecstatic eyes to TRUTH DIVINE!
(TN I.168-70, IV.521-24)

Concerning "wavy lawns," Darwin offers a long and detailed footnote (taken verbatim from *Zoonomia* XIV.6) to support his contention that when we see any object of vision which bears any similitude to the form of the female bosom, "if the object be not too large, we experience an attraction to embrace it with our arms, and to salute it with our lips, as we did in our early infancy the bosom of our mother." This may suggest an additional link between "beauty"⁴⁴ and "Beulah"--as in *Milton* 30.10-11, "Beulah to its Inhabitants appears within each district / As the beloved infant in his mothers bosom round incircled."

The third edition of *The Economy of Vegetation* (1795) included a new illustration, engraved by Blake, of "The Tornado" (illus. 5). A Note, as usual, contains the meat of the discussion; this one follows a note on the "Maelstrom" which labels that phenomenon "an extensive vortex, or eddy," testifying to the general linguistic equivalence between vortex-eddy-whirlpool-(tornado) which would have informed Blake's reading. Darwin tells us that two major winds meeting in contrary directions cannot be supposed to balance each other, and as a result "a rotatory motion will be produced as they ascend like water falling through a hole [sic], and an horizontal or spiral eddy is the consequence; these eddies are more or less rapid, and are called Tornadoes in their most violent state" (EV Add. N. XXXIII). This violent eddy "has not only its progressive velocity, but its circular one also,

which thus lifts up or overturns every thing within its spiral whirl." This offers a potentially significant lesson in Blakean psycho-physics: expressed more simply, "The surface of contact between two currents curls over to form a vortex"⁴⁵--perhaps even the surface of contact between "currents of creation," or even, contrary ideas. Blake's engraving is striking in comparison with others done about this time--as a Tornado, or spiral eddy, the various coiled serpents represent the circular velocity of the vortex. The left-hand figure in plate 6 of *The Book of Urizen* suggests, in particular, the inverse, inverted image of "The Toronado."

But there are other pleasures to reading Darwin aside from reading-in Blake. One can only feel great admiration for the man, and for the growing power of experimental science, after pondering Darwin's note that the larynx is "something like the trumpet stop of an organ, as may be observed by blowing through the wind-pipe of a dead goose" (TN Add. N. XV). And there is a certain charm in Darwin's style, when taken in small doses:

[the NEREID's] playful Sea-horse woos her soft commands,
Turns his quick ears, his webbed claws expands,
His watery way with waving volutes wins,
Or listening librates on unmoving fins.
(EV III.227-80)

And there are haunting lapses--as in the verses on the "electric kiss" (EV I.349-56), or the story of the plague-diseased Aegle and her lover Thyrsis, who "clasps the bright Infection in his arms" (EV IV.106). And there is still the pleasure of "archeological" discovery; who knows?--someone may yet vindicate Richard Edgeworth's belief that "in future times some critic will arise who shall re-discover *The Botanic Garden* and build his fame upon this discovery. . . . It will shine out again to the admiration of posterity" (cited in Logan, p. 94). But anyone, surely, can safely take the pleasure of reading Darwin once.

Darwin's poetical works are now available in facsimile as part of the Garland "Romantic Context" series, with a serviceable introduction by Donald H. Rieman.⁴⁶ Unfortunately, these are not as successful as the facsimile editions published by the Scholar Press in 1973--most importantly with regard to the illustrations, which in the Garland edition look like bad xeroxes, with the names of artist and engraver sometimes cropped off. The Garland series chooses, curiously, to reproduce the second edition of *The Loves of the Plants*. This opens the way to some interesting comparisons⁴⁷ for the student having access to both reprints or to other later editions, but offers a slightly less successful text for the single-copy reader. The Garland *Temple of Nature* also includes *The Golden Age*, a parodic epistle in verse issued under Darwin's name; the fact that one university bibliographer once accepted the attribution hardly justifies its inclusion, which only serves to make one the more regret the exclusion of the truly damaging parody, "The Loves of the Triangles." Still, every undergraduate library should now include Darwin, and for

those that do not, the Garland edition would be the easiest solution.

¹ James V. Logan's summary of some passages in *The Botanic Garden* (*The Poetry and Aesthetics of Erasmus Darwin*, Princeton Studies in English 15 [Princeton: Princeton University Press, 1936], p. 117).

² Students of Darwin, who usually delight in showing his considerable presence in the imaginations of the Romantics, have been at an imaginative loss in dealing with Blake. For Desmond King-Hele, "Blake detested the technology celebrated in *The Economy of Vegetation*, and was probably none too pleased that his superb engravings contributed to the poem's success" (*Doctor of Revolution: The Life and Genius of Erasmus Darwin* [London: Faber & Faber, 1977], p. 306); Donald M. Hassler finds that Blake "did not use [like Shelley] science as a rhetorical foundation for his Platonism. . . . Blake had no reason to be indebted to Darwin and, in fact, deliberately stayed away from Darwin more than did any other Romantic" (*Erasmus Darwin*, Twayne's English Authors Series [New York: Twayne Publishers, 1973], p. 127).

³ Francis D. Klingender, *Art and the Industrial Revolution*, ed., rev. Arthur Elton (New York: Augustus M. Kelley, 1968), p. 39.

⁴ Fuseli acted as the initial go-between for Darwin and Johnson (King-Hele, p. 162), and Darwin effusively praises the "nightmare . . . mark'd by FUSSELI'S poetic eye" (*The Loves of the Plants*, III.51ff.).

⁵ King-Hele reports that "The *European Magazine* quoted the opinion that *Zoonomia* 'bids fair to do for Medicine what Sir Isaac Newton's *Principia* has done for Natural Philosophy,' and the *Monthly Magazine* thought it 'one of the most important productions of the age'" (p. 241).

⁶ See Norton Garfinkle, "Science and Religion in England, 1790-1800: The Critical Response to the Work of Erasmus Darwin," *Journal of the History of Ideas*, 16 (June 1955), 376-88. The most effective attack was a sustained parody appearing in the first issues of *The Anti-Jacobin Review* (1798); entitled "The Loves of the Triangles," it is thought to have been authored by George Canning and two collaborators.

⁷ The poem is so named only on the title page, reflecting a last-minute change from the announced pre-publication title (then subtitle), *The Origin of Society*.

⁸ According to Coleridge, "Dr. Darwin laboured to make his style fine and gaudy, by accumulating and applying all the sonorous and handsome-looking words in our language. This is not poetry . . ." (Hassler, p. 100). James Logan concludes that Darwin offers "a supreme example of bad taste in ornate language" (p. 141).

⁹ Many quotations could be introduced here; Coleridge again, before he soured on Darwin, wrote of ". . . Dr. Darwin, the everything, except the Christian! Dr. Darwin possesses, perhaps, a greater range of knowledge than any other man in Europe, and is the most inventive of philosophical men. He thinks in a new train on all subjects except religion"; King-Hele writes, "Though I may be biased, I regard Erasmus Darwin as the greatest Englishman of the eighteenth century" (King-Hele, pp. 260, 323). In addition to his own writing Darwin translated Linnaeus, founded the famous "Lunar Society," was so noted a doctor that he was requested to become the Royal Physician, and was Charles Darwin's grandfather.

¹⁰ MHH 8; Blake citations are taken from David V. Erdman, ed., *The Poetry and Prose of William Blake*, 3rd printing rev. (Garden City, N. Y.: Doubleday, 1968).

¹¹ Erasmus Darwin, *Zoonomia; or The Laws of Organic Life*, vol. I (London: J. Johnson, 1794), p. 509.

¹² TN IV.453n.; cf. Add. Note VIII. Darwin is cited from the Scholar Press Facsimiles of *The Botanic Garden* and *The Temple of Nature* published by the Scholar Press (Menston, Yorkshire) in 1973 with introductory notes by Desmond King-Hele; these reprint the first editions of each work or part (so creating a facsimile of *The Botanic Garden* which was never offered to the public--although many subscribers to the first edition of *The Loves of the Plants* undoubtedly bound up their own after purchasing *The Economy of Vegetation*).

¹³ If these illustrations do have any relevance they would necessarily posit a post-1802 date for the composition of the two passages from *The Four Zoas*.

¹⁴ Compare Logan's description of the presence of Lucretius in Darwin: "ghostlike, the influence . . . is more pervasive than factual and detailed" (p. 121).

¹⁵ In this respect Darwin represents the culmination of a history of "visionary"-scientific didactic poetry which includes Blackmore's *Creation*, Brooke's *Universal Beauty*, and a host of others. There is a volume to be written on this tradition and its relation to Blake.

¹⁶ Logan accurately notes that "Permeating *The Botanic Garden* and *The Temple of Nature* is a deep exhilaration, perhaps unconsciously transmitted into his work. It derives from his delight in the order and unity of nature, and his intense realization of a wonder newly born into the world, the infant science. The generation of poets that followed . . . failed to perceive that Darwin was a modern prophet, not inspired perhaps, but nevertheless a seer . . . the first English poet to interpret modern science" (p. 147).

¹⁷ Walpole also wrote of the poem, it "is so deep, that I cannot read six lines together and know what they are about, till I have studied them in the long notes" (*The Letters of Horace Walpole*, ed. Mrs. Paget Toynbee [Oxford, 1905], XV, 110).

¹⁸ *Bulletin of the New York Public Library*, 78 (Summer 1975), 397-417.

¹⁹ David Erdman suggests that Luvah's name is related to "lava" via Darwin (*Blake: Prophet Against Empire*, rev. [Garden City, N. Y.: Doubleday, 1969], p. 334).

²⁰ The same night, evidently, that the stars threw down their spears/spheres/tears.

²¹ "Urizen: The Symmetry of Fear," in *Blake's Visionary Forms Dramatic* (Princeton: Princeton University Press, 1969), pp. 146-73, p. 153.

²² Like Ahania:

. . . a faint shadow wandering
In chaos and circling dark Urizen,
As the moon anguished circles the earth; (BA 2.38-40)

²³ "Erasmus Darwin and William Blake," *Eighteenth Century Life*, 4 (March 1978), 79-81.

²⁴ Darwin stated at the outset of the poem that the Sylphs, together with the Gnomes, Nymphs, and Salamanders of Rosicrucian doctrine, afford "proper machinery for a philosophic poem; as it is probable that they were originally the names of hieroglyphic figures of the Elements, or of Genii presiding over their operations. The Fairies of more modern days seem to have been derived from them. . . ." Klingender's observation that "Darwin's nymphs reveal a graceful charm and a mischievous propensity for unexpected metamorphoses into machinery, plants or elemental forces of nature" (p. 37), suggests that they are not entirely unrelated to Blake's "mighty ones"--or to his Genii, Gnomes, Nymphs, and Fairies for that matter.

²⁵ I discuss this further in "Spears, Spheres, and Spiritual Tears: Blake's Poetry as *The Tyger*, 11. 17-20," forthcoming in *Philological Quarterly*.

²⁶ 3. The eternal mind bounded began to roll
Eddies of wrath ceaseless round & round
And the sulphureous foam surgeing thick
Settled, a lake, bright, & shining clear:
White as the snow on the mountains cold.

²⁷ Hassler notes that Darwin "is not troubled with trying to discover one central myth--not troubled because he basically understands, I think, that there is no such final unity" (p. 28)--for Blake also "a Perfect Unity Cannot Exist," but everything hinges on whether or not one wishes to pursue the qualification, "but from the Universal Brotherhood of Eden" (FZ 3).

²⁸ See "The Thunder of Egypt," in Alvin H. Rosenfeld, ed., *William Blake: Essays for S. Foster Damon* (Providence, R. I.: Brown University Press, 1969), pp. 158-95.

²⁹ See Albrecht von Haller, *First Lines of Physiology*, trans. William Cullen, *The Sources of Science* No. 32, 2 vols. in 1 (1786; fac. rpt. New York and London: Johnson Reprint, 1966), Sect. 882.

³⁰ "Evolution and William Blake," *Studies in Romanticism*, 4 (Winter 1965), 110-18.

³¹ George Poulet offers some important remarks on this theme in *The Metamorphoses of the Circle*, trans. Carley Dawson and Elliott Coleman (Baltimore: Johns Hopkins University Press, 1966), pp. 55 ff.

³² A note adds that "the Greek word *Storgè* is used for the affection of parents to children" (Add. N. IX), offering another possible source for Blake's unique description of "Love of Parent Storgous Appetite" (FZ V, 61.10).

³³ James Logan writes: "It must be admitted that [Darwin] narrowed down the mental process called imagination to more precise terms than any one who went before him. But in doing so, he greatly limited the scope of imagination; . . . Imagination . . . according to Darwin, is a state in which our ideas are evoked by mere sensation, by the emotions of pleasure and pain; it is best designated by the word *revery*" (p. 54).

³⁴ Darwin continues, "The circumstances attending the exertion of the power of ATTRACTION constitute the laws of motion of inanimate matter"--Eternity precedes the constitution of these laws ("Earth was not: nor globes of attraction").

³⁵ This same argument in Darwin's *Phytologia*, or "a theory of vegetation" (Dublin, 1800), adds ". . . and much pleasure is afforded" (cited by Hassler, p. 76).

³⁶ King-Hele, p. 202; he cites W. Mankowitz, *The Portland Vase and the Wedgwood Copies* (London: Deutsch, 1952). Before Darwin the vase had been discussed and reproduced in Montfaucon's *L'Antiquité Explicquée* (1719).

³⁷ G. E. Bentley, Jr., *Blake Books* (Oxford: Clarendon, 1969); for Blake there would have been the added pleasure of having his engravings used rather than some existing ones by Bartolozzi. The engravings are dated Dec. 1, 1791.

³⁸ "Gold" enters the association through "chrysalis" (from Greek *chryseos*, gold) and the aureate possibilities of "aurelia."

³⁹ Roe identifies the painting referred to as Reynold's "Death of Cardinal Beaufort" ("The Thunder of Egypt," p. 166).

⁴⁰ There is, indeed, some special pleading in Darwin's argument; for as Logan notes, no one can write a poem on scientific processes and be pictorial without being abstract except through allegory, personification, and simile: "Everything must be interpreted through symbols, if fantastic none the less concrete. If no concrete symbol can be found, then the abstraction must be addressed directly, hailed by name and importuned, and thus dragged bodily before the mind of the reader" (pp. 138-39). For example, "an illicit love affair is used as an allegory for the chemical reaction of nitric acid with oxygen to produce what is probably a nitrate salt. During the course of this reaction, a reddish vapor is given off and heat escapes; and Darwin likens this result to Mars' seduction of Venus and to Vulcan's ensuing anger, which ties them together with a net, that, the chemical bond" (Hassler, p. 56). For Blake, such limited symbols must ultimately be subsumed to apparent confusions of text--that is, the whole text itself is the only adequate "symbol."

⁴¹ Compare the Blakean spectre which "hunts [the] footsteps" of the Emanation (M 32.4-5).

⁴² Hassler notes that "Darwin uses various techniques throughout his verse to make his characters as sensuous and as 'sexual' as possible" (p. 83).

⁴³ David Erdman characterizes *The Book of Thel* as "pictorially and metaphorically . . . a curious counterpart" of *The Loves of the Plants*; "some of Blake's flowers and their human forms seem to derive from Darwin's text, notes, and illustrations. . . . Darwin's emphasis on sexual encounter and aggressive masculinity seems particularly relevant" (*The Illuminated Blake* [Garden City, N. Y.: Doubleday, 1974], p. 33).

⁴⁴ In connection with Darwin's "breast-esthetic," Logan observes: "Here we have the whole foundation of Darwin's theory of poetry

and art. Beauty is frankly sensuous; it arises from those things, belonging to nature which have given us pleasure through our different senses. . . . It is a much cleverer, and certainly more modern, explanation of the delight that we receive from curving lines than Hogarth's 'wanton chase' theory" (p. 62).

⁴⁵ Theodor Schwenk, *Sensitive Chaos: The Creation of Flowing Forms in Water and Air*, trans. Olive Whicher and Johanna Wrigley (New York: Schocken Books, 1976), p. 47.

⁴⁶ Erasmus Darwin, *The Botanic Garden*, intro. Donald H. Reiman, A Garland Series: Romantic Context: Poetry; Significant Minor Poetry 1789-1830, selected and arranged by Donald H. Reiman, in two vols. (New York and London: Garland Publishing, 1978); and

in the same series, Erasmus Darwin, *The Golden Age and The Temple of Nature*, intro. Donald H. Reiman.

⁴⁷ For example, in the first edition:

So NINON pruned her wither'd charms, and won
With harlot-smiles her gay unconscious son;--(I.125-26)

and in the second edition:

So, in her wane of beauty, NINON won
With fatal smiles her gay unconscious son.--(I.125-26).

The second edition drops the wonderful sequence about the Polish salt mines and their underground cities (first ed. IV.309-26).

"Far yet extend that biographic page!": Some Thoughts on Donald Reiman's Hayley

William Hayley. Ode to Mr. Wright and Other Poems, The Eulogies of Howard/ Ballads/Poems on Serious and Sacred Subjects, A Poetical Epistle to an Eminent Painter and Other Poems, An Essay on Sculpture.

Reviewed by Joseph Wittreich



Hull: William Hayley, 1800 (Mansell Collection)

Students who learn from their mentors only that Blake left Felpham in a snit, that thereupon he "immortalized [Hayley] as a fool not to be endured," and so conclude, "no one much cares what Hayley said," are unlikely to be affected by, much less interested in, historical judgments of Blake's patron--are indeed apt to be impatient with them and unappreciative of an effort, such as Donald Reiman's, to situate Hayley in a "Romantic Context." They may even be suspicious, if not wholly contemptuous, of an enterprise that would publish four volumes of Hayley's verse under the caption, "*Significant Minor Poetry*" (my italics). This poetry is not by current standards, much less by the standards of Hayley's more astute contemporaries, good. It is, in the most generous terms, an

achievement of the left hand, yet offers its own rewards, even to the most recalcitrant Blakeans, presuming they are able to cast off prejudice long enough to ask the right questions. Why Blake left Felpham we know. Why he went to Felpham in the first place and what he and Hayley talked about, off and on for three years, are matters of interest that these four volumes might fuel. They do not answer such questions, to be sure, but set forth clues for answering them; they might even inspire a more enterprising student to heed the Hayleyan plea--"extend that biographic page!"--and, in the process, to adjudicate between widely discrepant assessments of Hayley's place in literary history and of the role he might have played in Blake's life and art, even in the formation of an aesthetic that underlies it.