()

Sarah Lindsay. Primate Behavior. Grove Press 1997. 112 pp. \$11.00 (paper)

()

Sarah Lindsay. Mount Clutter. Grove Press 2002. 80 pp. \$14.00 (paper)

Sarah Lindsay. Twigs & Knucklebones. Copper Canyon Press 2008. 118 pp. \$15.00 (paper)

In the beginning, poetry took as its subject everything. The poets of antiquity petitioned the gods, chronicled history, spun tragic tales of the human condition, and sometimes even wrote about their inner lives; yet their prime mission was to make the observable universe ponderable by giving things names and explaining how they work. Today we would call this science.

Hesiod's Works and Days is the earliest known didactic poem. Dated between 750 and 650 B.C., it's also one of the oldest surviving poems of any kind; classical tradition held that Hesiod was a contemporary of Homer, if not his elder. Works and Days is a rambling treasure house of pious fables, farming tips, and homely wisdom, derived from generations of sky-gazing and practical experience that preceded the written word a Farmers' Almanac in dactylic hexameters that was familiar throughout the Greek-speaking world from public recitations. Verse was the medium of the Greek philosophers immediately preceding Socrates, who sought rational explanations for natural phenomena that went deeper than "the gods will it so." Lucretius, the first great Roman poet, composed a scientific encyclopedia that explained everything from atomic theory to the infinity of the cosmos in flawless verses sparkling with imagination.

As science developed into an ever more complex logical system too complicated to explain in dactyls and iambs, didactic poetry gradually lost its authority as the principal conduit of knowledge to a mass audience. Readers gave up on the idea that they could learn any but purely subjective truths from poetry. By 1915, the year Einstein completed his theory of general relativity and Ezra Pound started work on *The Cantos*, the chasm between science and art, poetic or otherwise, was nearly absolute. The vernaculars of both disciplines were becoming as remote and alien to even well-educated

۲

readers as the cosmic mysteries had been to preliterate humankind, before Hesiod commenced the grand project of explaining the world with words.

()

These primordial musings are prompted by reading the poetry of Sarah Lindsay, who has successfully revived the didactic genre in our time. It's hard to think of a phrase more likely to send twenty-first-century readers running for cover than "didactic poetry." Poetry is a tough enough sell without prefixing an adjective (derived from " $\delta \iota \delta \sigma \kappa \omega$," meaning not only "to teach" but "to learn") that is now usually regarded as code for "boring." Yet there stands the didactic poem at the origin of literature, arising from the deepest yearnings of the intellect. Over the course of three books of flexible free verse, published beginning in 1997, Lindsay has become ever more deeply engaged with the questions "What do we know about the world?" and "How do we know that we know it?"

The distinguishing mark of a Sarah Lindsay poem, as of the works of Hesiod, Lucretius, and their progeny, is a point of view infinitely collapsible and infinitely extensible, from house dust to galaxies and back again. Yet if the point of view is cosmic, the tone is down to earth and the settings cheerfully homey. In "Mount Clutter," the title poem of her second collection, Lindsay compares the fossil record to the random junk that has accumulated in the attic of Mother Earth, represented as an indefatigable collector:

> One day when the planet was idly pressing stegosaurs in her scrapbook, she threw out a whole plateau of souvenirs from the Ordivician, on impulse. She'd long since run out of places to put things

The destruction that time wreaks on the planet's most precious possessions, "prize bones [that] weather out of a cliff and crumble" and cave paintings of "hands, great auks, and well-fed horses" that have been effaced by rising seas, is expressed in an indisputable modern apothegm: "You can't expect your mother to save your comic books forever."

As any scientist will tell you, it's pointless to moan over the data one lacks:

()

What if you don't find the Missing Link, the Conclusive Proof

of that cherished hypothesis you cooked up along with the instant soup on your hot plate.

Rather, Lindsay's garrulous planet counsels herself to rejoice at a great discovery:

()

Wrapped in the sports page from August third, 500 million B.C.,it's the Cambrian worm *Insolicorypha psygma*: dozens of bristles, a head divided in two,if that was indeed the head. Once common as pennies; now this is the only one.

What's distinctively scientific here isn't the impressive Latin name but rather the doubt expressed by "if that was indeed the head." This isn't a poem about stegosaurs and worms: Lindsay's alert eye for ambiguity and her restless push toward the outer limits of the knowable make "Mount Clutter" a fine example of didactic poetry.

Nor is "Beethoven and the Ichthyosaurs (Opus 135, Quartet in F major)," the poem that follows it in the collection, about reptiles and a string quartet. Lindsay, a dedicated amateur cellist, makes the randomness of the universe conceivable—makes it bearable—with her image of the planet puttering around in the attic, but her main subject is a human one. In "Mount Clutter" she writes:

> Go on rummaging, brushing off dust, though you may find later that it was the dust you wanted.

Her subject is the quest, not the quarry. The randomness of the universe has resulted in rips and tatters in the fabric of our knowledge of the world, which necessarily entails a randomness in our understanding of it. "Beethoven and the Ichthyosaurs" begins:

Beethoven hums three notes, "Must it be?" in his sleep. Chaos theory has come to him in a dream, but it won't be captured for another hundred years;

()

()

when he wakes it lingers only in his hair and the distribution of little scars on his cheek. It's hard to see a thing without a name.

So Lindsay starts naming things, compiling a genealogical catalogue of fossil ichthyosaurs from "the Lias epsilon layer near Stuttgart." Then, as in a string quartet, she returns to her opening theme:

(�)

On Beethoven's desk, a sheet of dust and light obscures the motto framed under glass: "No mortal can pierce My veil."

Rather than piercing the veil, Beethoven demarcates its precise limits. He traces the outlines of the knowable, a process the poet explains in a marvelous passage that intertwines musical description and paleontological analysis:

Delineate it, then. First the viola, grace notes, a groping march, lunge and stall, scars rain down on the page black note by note. *Lento assai, cantate e tranquillo.* Five flats, then four sharps, clusters of vertebrae. Slurred octaves, a waving tail that slows and stops.

In her finale, Lindsay carves a verbal sculpture of the rock bed that defines the outlines of the fossil reptile:

> Fallen black grains so faithful to a shape that after a hundred million years you can trace its skin, its unborn children, the record salted down of what was and must be.

Thus Beethoven's question, posed in the first line of the poem, is answered in its last. In one deft stroke, Lindsay inverts infinite past time into the infinity of the future—what must be.

In the second of *Mount Clutter*'s three parts, Lindsay does what the didactic poets of antiquity did: She concocts a legend to explain the topography of

human knowledge. A cycle of fourteen poems called "Discovery of the Bufo Islands" describes the natural history of an imaginary archipelago populated by marvelous creatures that reproduce in miniature the range of terrestrial life. She begins, logically, with geology, expressed by a domestic metaphor:

•

At the end of any triple batch of cookies, one sheet goes into the oven sparsely knobbed with mismatched lumps of bowl scrapings, liable to be forgotten and overbaked.

These are the Bufo Islands, not to be found in any atlas, though Lindsay informs us that rumors of them flit through the charts and journals of early maritime explorers: "Each has been named too many times to have a name."

Of course that doesn't deter the intrepid poet-explorer. An island called Aiaia is "old, old, / weathered down to a nub and the nub is weathered down." Since it came out of the oven, Aiaia has been

> polar, equatorial, continental, isolate, baked and frozen, washed, collided with, and always wandering.

It shares the white-faced fruit bat with the rest of the Bufos but lacks a single species of toad (a little learned joke, as "*bufo*" is the Latin word for toad and its genus name in binomial nomenclature). The poem describes the imaginary island with the vividness of the Homeric rhapsodes in their evocation of the islands visited by Odysseus. Lindsay marshals an array of emphatic, monosyllabic Anglo-Saxon verbs that mimic the violence of geologic activity:

But the island grinds in its bowels a few small diamonds, and bones of pygmy elephants; insects pluck and twang its particles, fallen leaves fur it with fresh decay

Other islands in the Bufos take their names from a character in an opera by Mozart (Despina, the meddlesome servant in *Così fan tutte*), an early Christian saint (Agnes, a child martyr whose virginity was preserved by a

 $(\blacklozenge$

series of miracles), and either chanteuse Rosemary or her movie-star nephew George (Clooney). Corbett Island presumably takes its name from Jim Corbett, the Anglo-Indian naturalist and hunter, author of ripping tales such as *Man-Eaters of Kumaon* and the eponym of India's first national park. What fun it is, naming things!

()

The creator of imaginary islands has the godlike power most poets aspire to, if not openly, then in their hearts. To populate her archipelago, the poetical prime mover can resurrect a species thought to be extinct for more than five hundred million years, the opabinia, a ridiculous, soft-bodied creature with five eyes and a clawlike proboscis, which is known to science from just ten fossils. *Opabinia regalis* was a complete failure, an evolutionary dead end so profound that when its fossils were first discovered in the Burgess Shale, in the Canadian Rockies, the animal was thought to be unrelated to any known phylum. When the British paleontologist Harry Whittington first presented his analysis of it at a scientific congress, the audience laughed. Yet it lives on in the Bufos, in the company of other, far more plausible-sounding animals invented by Lindsay, such as the fourtoed sloth.

Sarah Lindsay's niche in contemporary poetry might be likened to that of Joseph Cornell's in modern art. Anything might turn up in a Cornell box: a stuffed bird, images snipped from old engravings, dice, corks, a broken watch—anything. Like Cornell, Lindsay also creates tiny, complete worlds that operate according to their own peculiar laws. In "Discovery of the Bufo Islands" and other poems, she compiles scientific miscellanies, random flotsam harvested from the limitless sea of knowledge. Everything in the portable cosmos must have a name, but the magical sense of wonder, like that experienced by Keats's sky-gazer when a new planet swam into his ken, which prompted the need to name things in the first place, is intrinsic to the process and cannot be diminished without disarming it.

\$

The modern reader sees much more magic in Hesiod than anything resembling our idea of science. A useful truism holds that the history of science is the process of distinguishing between the two, and in the beginning magic and science were the same thing. Hesiod's tone is oracular; he writes in the

confident expectation that the reader will believe him. Here is a representative sample of his wisdom:

۲

When the Pleiades, daughters of Atlas, rise, begin your harvest, and plow your corn fields when they set. For forty nights and days they are hidden, and after the year has moved round they appear again, when first you sharpen your sickle. This is the law of the plains, and of those who live near the sea, dwellers of the rich country, the glens and hollows far from the tossing sea. Strip the land to sow, strip to plow and strip to reap, if you wish to lay by all Demeter's fruits in due season, that each kind may grow in its season.

Words to live by in Boeotia in the eighth century B.C., but Hesiod offers little for posterity, even Athenians in the age of Pericles, to latch onto. Hesiod's antiquity has always been one of the most interesting things about him. Tradition cast him and Homer as rivals for the honor of being the first of poets, both in priority and prestige. In the *Contest of Homer and Hesiod*, a romance dating to the second century A.D., Hesiod improbably triumphs. This classical poetry slam seesaws back and forth; to break the tie, the king presiding over the contest asks each of the poets to recite his best verses. Hesiod chants the passage about the Pleiades quoted above, and Homer parries with a battle scene from the thirteenth book of the *Iliad*. The audience prefers Homer, as most modern readers do, but the royal judge gives the palm to Hesiod, declaring that "he who called upon men to follow peace and husbandry should have the prize rather than one who dwelt on war and slaughter."

(�)

In the poems of the pre-Socratic philosophers the reader encounters entirely original ideas not grounded in the oral tradition. Xenophanes (c. 570–475 B.C.), one of the first writers to philosophize in verse, survives in shards of wisdom such as "All things come from earth, and all things end by becoming earth." What's puzzling about the epigram is that it's so obvious—one wonders why it was considered particularly wise—until one takes into account that Xenophanes was refuting Anaximenes, who

(�)

had propounded the view that all things come from air. In this fragment, Xenophanes comes within striking distance of modern meteorology:

(�)

The sea is the source of water and the source of wind; for neither would blasts of wind arise in the clouds and blow out from within them except for the great sea, nor would the streams of rivers nor the rainwater in the sky exist but for the sea; thus the great sea is the begetter of clouds and winds and rivers.

Parmenides of Elea, a disciple of Xenophanes, was the most influential of the pre-Socratics, spinning theories that existed in the realm of pure thought without touching on the visible universe. No concept could be more elemental than "Nothing comes from nothing," but until Parmenides cast it in verse, ontology had no place to start. Plato, in his dialogue *Parmenides*, acknowledged him as his prime inspiration. Plato says that Parmenides visited Athens with his disciple Zeno when Socrates was a young man, and that their meeting launched Socrates' career as a philosopher. It's easy for any reader of Plato to imagine young Socrates hearing Parmenides remark, "What can be spoken and thought of must exist, for it can exist but nothing cannot" (Fragment 6), and for the first time setting his mind to work framing analytical questions.

Parmenides' only poem, *On Nature*, consisted of three thousand verses, of which a hundred and sixty survive. In a proem, Parmenides writes an ecstatic description of his own apotheosis. The daughters of the sun snatch him up and carry him into the heavens, where he is welcomed by the goddess of avenging justice, who takes his right hand in hers and says:

Dear boy, transported by immortal charioteers and horses to this our abode, rejoice in the destiny in no way evil that has brought you on this path, far though it be from that trod by men, for it is both right and just. You want to learn every thing for yourself, the well-rounded truth, your heart unmoved by the opinions of men,

۲

in which it is not possible for there to be true faith. Yet of these things you will learn to judge rightly As you travel through everything that exists.

Parmenides thus endows his philosophical quest with his own prestige as a traveler of the skies, a man on whom the heavenly gods have conferred the destiny to learn everything there is to know.

()

The Sicilian philosopher Empedocles (*c*. 490–430 B.C.) went even further and claimed that he himself was a god. An aristocrat of Acragas (modern Agrigento), he lived like a lord and dressed in a purple robe with a golden girdle, bronze sandals, and a Delphic laurel wreath. He reconciled the centuries-old dispute about which of the elements was the principal stuff of the universe by proposing that all four of them—water, earth, air, and fire—are eternal and indestructible, and that the infinite variety of creation results from the proportions in which they are combined: "All things are fitted together and constructed out of these, and by means of them they think and feel pleasure and pain." He went on to offer confident accounts of how a wide variety of physical phenomena function, presenting the earliest comprehensive theories of embryology, respiration, vision, and the limits of human perception.

Empedocles also developed a strange, wonderful myth of the origin of species. In the beginning, after the four elements had run through their many permutations, the earth was populated by the various component parts, the limbs and organs of all living creatures. After wandering the earth independently, the parts began to join together in random combinations, creating bizarre chimeras: creatures of double sex, heads without necks, arms without shoulders, ox-faced men and man-faced oxen. Finally, in the part of the myth that interests modern readers seeking a classical pedigree for Charles Darwin, ill-assorted monsters like the opabinia became extinct, while the creatures that were constituted harmoniously, such as the man-faced men and ox-faced oxen, survived.

Empedocles' most outrageous claim was that he himself was a god in exile among mortals. Addressing the citizens of "tawny Acragas, which crowns the citadel," he proclaims:

۲

I, an immortal God, no longer mortal, wander among you, honored by all,

(�)

adorned with holy diadems and blooming garlands. To whatever illustrious towns I go I am praised by men and women, accompanied by thousands who thirst for deliverance. Some ask for prophecies, and some entreat for remedies against all kinds of disease.

(�)

Empedocles says that he was returned to the misery of earthly existence as punishment for the Pythagorean sin of eating meat, condemned to suffer successive reincarnations during a purgatorial journey through the orders of nature and elements of the cosmos. His present mortal incarnation is his last, he says: When he dies, he will reclaim his godhead.

Inevitably, the subject of Empedocles' death inspired many legends. One popular account held that he committed suicide by leaping into the crater of Mount Etna. In a satire by Lucian of Samosata, the Icaro-Menippus (c. A.D. 160), a Jules Verne–like account of a voyage to the moon, the hero Menippus meets Empedocles, "his complexion like crushed charcoal mixed with ashes, as if he had been baked." In a mocking tone that anticipates Lindsay's Earth laboring over her scrapbook, the charred philosopher replies, "I am Empedocles the physicist himself. After I threw myself into the crater, the smoke of Etna wafted me up here. Now I live in the Moon, where I walk on air and feast on dew." Diogenes Laertius, in Lives of Eminent Philosophers (c. third century A.D.), took the cynical view that Empedocles hoped by jumping into the crater to vanish without a trace and thereby to persuade the Sicilians that he had rejoined the immortal gods; according to Diogenes, the deception was belied when the volcano threw back one of his bronze sandals.

In "Empedocles on Etna," a dramatic poem published in 1852, Matthew Arnold transformed the heroic poet-philosopher into a Victorian scholar who laments the vanity of a life devoted to learning. Nonetheless, he retains the addictive passion for naming things:

۲

Look, the world tempts our eye, And we would know it all! We map the starry sky, We mine this earthen ball, We measure the sea-tides, we number the sea-sands;

()

We scrutinize the dates Of long-past human things, The bounds of effaced states, The lines of deceased kings; We search out dead men's words, and works of dead men's hands;

We shut our eyes, and muse How our own minds are made, What springs of thought they use, How righten'd, how betray'd— And spend our wit to name what most employ unnamed.

Arnold sighs with his wonted world-weariness: All this mapping and measuring and naming is a futile gesture in the face of the thinker's mortality. How striking the contrast with Sarah Lindsay, who experiences something like joy and finds something like the meaning of life in spending her wit to name what most of us leave nameless.

()

Empedocles was the last of the ancient Greek philosophers to compose in verse. Because of the enormous prestige of Plato and Aristotle, the method of philosophy shifted from instruction to dialectical discourse, and the medium from poetry to prose. Yet didactic poetry experienced a magnificent revival with Lucretius' *De rerum natura* (*On the Nature of Things*), an epic-length poem that expounds Epicurean philosophy through scientific speculation. The poem is a standby for Latin teachers who want to impress on first-year students the Timeless Relevance of the Classics, for in several passages Lucretius explains natural phenomena in ways that uncannily prefigure modern science, notably in his atomic theory.

Many of Lucretius' ideas are dead wrong and must have seemed incredible to his contemporaries. For example, he advances the theory that the images of the phenomenal world we see are thin membranes shed by objects—the husks of cicadas, bark from a tree—that float through the air until they strike our eyes. (In an early poem, "Lassie's Left Eye," Lindsay makes a faint allusion to Lucretius'

۲

 (\clubsuit)

fancy when she asks, "Is it true the retina keeps / a print of the last thing it saw?," and wonders, with regard to Lassie's retinas, "So what was their last sight, the crocodile going for Timmy, / or the canine fleshpots of Hollywood?")

()

However, Lucretius' atomic theory, on which he founded his description of the natural world, was a prophetic bull's-eye. Building on the ideas of the fifth-century Greek philosopher Leucippus and his disciple Democritus, Lucretius teaches that everything is compounded of invisible

tiny particles of matter, which he calls by many names: "first things," "first beginnings," "bodies of matter," "seeds of things" (but for some reason never "atoms," the perfectly apt Greek word at his disposal). In Book I, Lucretius describes the process by which these elemental particles create the variety of the phenomenal universe:

> The Many, changing in many ways, career through all space out of the infinite, excited by violent blows, trying out all sorts of motions and combinations until they finally arrive at those arrangements that constitute the sum of all created things.

Lucretius' theory of infinitesimal particles whizzing about combining and recombining was, from a scientific perspective, beginner's luck, for it was a product of the imagination and not based on empirical observation, which would not prove the existence of atoms until the late nineteenth century.

In the early twenty-first century, Sarah Lindsay, infusing her knowledge of modern physics with poetic imagination, elaborates a vision that is closer to Lucretius than to Ernest Rutherford or Niels Bohr:

> . . . in the tide pools on its most broken side, a luminous protozoan makes a pale blue spot in shadow. If a molecule near its heartless center ticks left, it will become an animal; if not, a plant. For now, it wallows in inches of water, young as an egg on the third day, glowing with indecision.

> > $(\blacklozenge$

(from "Aiaia")

Lindsay's syntax here mimics Lucretian rhetoric by presenting starkly opposed alternatives: "If not this, then the other thing." Her "tick" is a close translation of one of Lucretius' favorite words, *clinamen*, which means a swerve or turning aside, and serves much the same purpose in his theory of the articulation of life forms. The attribution of sentience ("glowing with indecision") to a microscopic blob also has a lively Lucretian feel.

()

The prestige and influence of Lucretius was enormous, and his mastery of the didactic genre may have deterred subsequent Roman poets from attempting to rival him. Virgil's *Georgics* are usually classified as didactic poetry but might be better viewed as an urbane homage to the genre. Virgil's nostalgia for the simple joys of country life is plainly the imaginative whim of an aristocrat who has never followed a plow. He explicitly declares his poem's ancestry by invoking Ascra, birthplace of Hesiod—

> I enter upon themes that in old times commanded praise and art; I venture to unstop the sacred fountains, and sing the lay of Ascra through the Roman towns . . .

—and later he pays pointed tribute to Lucretius:

(�)

Happy the man who could see into the causes of things, and cast beneath his feet all fear of man's inescapable fate, the roar of insatiable Acheron.

The *Georgics* marks the beginning of the end of didactic poetry in classical literature. Scientific themes may have commanded praise in olden times, but poets of the imperial age, bred to the luxurious life of Rome, were more apt to wonder if their lovers were faithful, or to find their own unfaithfulness suspected, than to ponder cosmic mysteries.

Didactic poetry lapsed into obscurity until 1734, when Alexander Pope revived the genre as a medium of moral instruction, didactic in the modern sense of sermonizing, with his enormously influential *An Essay on Man*. Pope's contemporaries delighted in his flawless versification and quotable phrases, but they learned little from his cantering iambs that had not been previously expounded with greater precision in prose. In *Biographia Literaria* (1817), Coleridge dismissed Pope's compositions as "a conjunction

(�)

disjunctive, of epigrams," and then put a fine point on the problem: "The matter and diction seemed to me characterized not so much by poetic thoughts, as by thoughts translated into the language of poetry."

(�)

Pope's metrical restatements of received wisdom are often more memorable than reliable. One famous couplet from *An Essay on Man* commands, "Know thyself, then, presume not God to scan, / The proper study of Mankind is Man." The reference to Socrates comes with a knowing wink, but Pope misrepresents his thought. In Plato's *Phaedrus*, Socrates says that before he can believe or disbelieve in the teaching of established religion, "I must first know myself, as the Delphian inscription says; for it would seem to me a laughable thing to speculate about other matters while I am still in ignorance of my own self." Pope, of course, reaches a quite different conclusion, that self-knowledge should be the end of philosophical study rather than its starting point.

At the end of the eighteenth century, didactic poetry about science had a decadent final flowering in Erasmus Darwin's *The Botanic Garden*, as confidently ambitious as any of its classical models. Published in two parts in 1789 and 1791, the poem is a summary of the scientific discoveries of the day rendered in heroic couplets and accompanied by long explanatory footnotes. The first part, which bears the dreary and misleading title *The Economy of Vegetation*, surveys the technological innovations and astronomical discoveries of the era, portraying scientists as heroes, if not demigods. Here, addressing the nymphs who inspire scientific studies, Darwin apotheosizes Benjamin Franklin:

> You led your FRANKLIN to your glazed retreats, Your air-built castles, and your silken seats; Bade his bold arm invade the lowering sky, And seize the tiptoe lightnings, ere they fly; O'er the young Sage your mystic mantle spread, And wreath'd the crown electric round his head.

The neoclassical fripperies strike the modern ear as hopelessly stale, and the intended ennoblement of the scientist fails, for it disregards both the intellectual core of science and the sometimes difficult and even dangerous circumstances under which it is carried out. Franklin's electrical experiments were not conducted in glazed retreats or on silken seats; he was squelching through the

۲

mud and flying a kite in a thunderstorm. A year later, the German scientist Georg Wilhelm Richmann (who translated *An Essay on Man* into German) died carrying out a similar experiment during an electrical storm.

()

Sarah Lindsay paints a much more vivid and truthful picture of the field scientist at work in "Alfred Russel Wallace in Venezuela," a poem in her first collection, *Primate Behavior*.

whatever unborn theory tickled his brain the jungle droned uninterrupted; undeniably earth devours the earthly. Ribbons of ants poured from trees to mince the flesh of his 160 species of fish, mold deployed its furry mouths on the butterflies tucked in his drying box, maggots hatched hungry from monkeys hung out in the sun. Kept alive, the monkeys ate the birds. His own feet rotted around the burrow holes of chigoe fleas; at night he made blood offerings to vampire bats and mosquitoes.

(�)

Lindsay reveals Wallace's pluck and dedication through a detailed account of the destructive forces of Nature that besiege him; the emblem of his courage is not an allegorical "bold arm" lifted against a stormy sky but his rotting, flea-bitten feet. The language is fresh as paint, powered by a series of intransitive monosyllabic verbs: The jungle drones, ribbons of ants pour and mince, maggots hatch.

The second part of *The Botanic Garden*, *The Loves of the Plants*, is based upon Linnaeus' system of classification and puts a heavy emphasis on reproduction. With his grandiloquent diction and coy sense of the ridiculous, Darwin portrays the natural world as a sort of botanical country dance. In his proem, sounding like a carnival tout, he invites the reader: "If thou are perfectly at leasure for such trivial amusement, walk in, and view the wonders of my INCHANTED GARDEN." The poem proper begins:

۲

Descend, ye hovering Sylphs! aerial Quires, And sweep with little hands your silver lyres;

With fairy footsteps print your grassy rings, Ye Gnomes! accordant to the tinkling strings; While in soft notes I tune to oaten reed Gay hopes, and amorous sorrows of the mead.— From giant Oaks, that wave their branches dark, To the dwarf Moss, that clings upon their bark, What Beaux and Beauties crowd the gaudy groves, And woo and win their vegetable Loves.

(�)

The cloying mock-heroic tone never lets up as Darwin describes one species after another as courting couples, the male plant a dashing swain boldly plighting his troth and the female a blushing maiden sighing with desire. These anthropomorphic double portraits, over-precious bonbons of camp to the modern ear, are explicated by footnotes full of exhaustive, straightforward botanical description, resulting in a tonal whipsaw that leaves the reader dizzy and soon bored.

Nonetheless, *The Botanic Garden* was one of the most popular poems of the last decade of the eighteenth century. Coleridge, in his complaint in *Biographia Literaria* about "thoughts translated into the language of poetry" as opposed to poetic thoughts, explains that this dichotomy became plain to him by frequent amicable disputes concerning Darwin's Botanic Garden, which for some years was greatly extolled, not only by the reading public in general, but even by those, whose genius and robustness of understanding enabled them afterwards to act foremost in dissipating these 'painted mists' that occasionally rise from the marshes at the foot of Parnassus." Twenty-one years before, in a letter to John Thelwall, Coleridge was more plainspoken: "I absolutely nauseate Darwin's poems."

÷

The disappearance of didactic poetry after Erasmus Darwin may be attributed not only to a revolution in taste but to the increasing difficulty of science itself, which had developed a specialized vocabulary that made most of its discoveries incomprehensible even to the well-educated general reader. Didactic poetry, from Hesiod to *The Loves of the Plants*, was based upon the assumption that an intelligent reader could read and

learn everything, including the latest scientific thinking. The *Elements* of Euclid, the elder Pliny's *Natural History*, and the treatises of Copernicus required more painstaking study and afforded less immediate pleasure to most readers than poetry or prose romances, but anyone with patience and good Latin could follow them. Yet by the end of the nineteenth century, as the intricacies of scientific thought became ever more abstruse and the mathematical vernacular ever more complex, an intellectual elitism emerged. *The Origin of Species*, by Erasmus Darwin's grandson, was among the last primary scientific texts that could be read and understood by the laity.

(�)

I don't think that Sarah Lindsay set out to launch a single-handed revival of didactic poetry; she simply sat down and wrote about what fascinates her. Other contemporary poets have written about scientific subjects. Brad Leithauser, for example, gave us *Darlington's Fall* (2002), a novel in verse about an American entomologist who comes of age in the early twentieth century. Leithauser enlivens his book with fascinating oddments of botanical and zoological lore, as Lindsay does, yet he does not peer into their inner causes and push the limits of what they can tell us. He is content to be enchanted and amazed. Here Leithauser describes the reaction of his hero as an adolescent, after capturing a beautiful butterfly unlike any he has seen before:

This is a miracle on the wing: Nothing like— *Nothing ever anything Like this before:* in this lot on the edge of town, Arrives a miracle:: a god: a goddess: down From heaven he/ she/ it appears, chancing to rest For one stunned moment on his shirtsleeve—

Despite the urgent italics and fussy punctuation, this is vague writing. When a scientist collects a new species of butterfly, he's unlikely to regard the event as a miracle. He may be excited, of course, but after all making such a find is the principal goal of collecting. A serious beginner would surely make an attempt to sex the specimen. As for "a god: a goddess," scientists tend to avoid fanciful analogies, and even if we grant the poet license to have his protagonist indulge in a classical metaphor, his trope

would be more persuasive if he saw wise Minerva or dancing Shiva on his shoulder. As an imaginative treatment of science, *Darlington's Fall* is poetry that looks from the outside in, shirking the question of why some people devote their lives to butterflies or quarks or dwarf stars.

()

To return to Lindsay, while most of her best poems are about science, from the beginning she has taken on other subjects. A poem in *Primate Behavior* speculates on the love life of Siamese twins. "La Marée," in *Mount Clutter*, is a tender portrait of a marriage, from the couple's wedding in Paris, when

> the Tennessee groom gazed at his Illinois bride (and sometimes still does) as if she were Nike of Samothrace and the rings of Saturn and a wedge of pecan pie

to the present, when they return from the doctor's office after receiving a "load of bad news." Yet in a recent group of poems, Lindsay addresses personal and domestic subjects in a chatty voice that lacks the toughminded cerebration of her best work. "Sweet Potato God," published in the journal *Gulf Coast* in 2011, begins:

> "A table, a chair, a bowl of fruit, and a violin," said the frizzly physicist, "what else does a man need to be happy?" A source of warmth. Chocolate cake. And what about books? what about sheet music? Some of us don't have the knack of traveling light. Asked to outfit a paradise, I'd begin with breads and books and dogs and lie awake thinking, what if I start to miss maple trees and their spinny seeds? wet garden hoses, or the smell of frying onions? and in the end, I'd take the world along.

Here Lindsay veers perilously near raindrops on roses and whiskers on kittens. When she says she needs books, she says nothing—for a poet, this is tantamount to averring a partiality for water. She likes chocolate cake: Me

()

too! But what is the point of sharing that information, except to establish a rapport with the reader based on the trivia of everyday life? The passage concludes with a rhetorical flourish that endows this list of nice things with the illusion of wholeness and purpose, but Lindsay's logic leads to the conclusion that this world is a paradise—a proposition that requires more than chocolate cake and garden hoses to support it.

()

Poets are entitled to ride their hobbyhorses. If you discovered the poetry of T. S. Eliot through *Old Possum's Book of Practical Cats*, you might not be inclined to read the rest of his work. (Conversely, if you were charmed by the book you might find *The Waste Land* and *Ash Wednesday* tiresomely obscure and depressing.) "Sweet Potato God" is harmless, but it marks a precipitous decline in artistic ambition for a poet whose work has heretofore described a rising arc of philosophical insight and sophisticated craft, which has modestly yet confidently sought a place in the grand tradition of instructive verse.

Sarah Lindsay's poetry is rarely overtly classical, but she has thoroughly assimilated the theoretical structures and motivating idealism of ancient science. In "Discovery of the Bufo Islands," without identifying the source, she exploits the familiar paradox of Zeno, the disciple of Parmenides who was present at Socrates' fateful meeting with his master:

(�)

On the Bufos, we approach comprehensive knowledge By covering half the distance to it, half the remaining distance, Half the diminished remnant, half again.

Lindsay is also fascinated by the origin of life and the earliest antiquity of civilization. "First Song for the *Ba* of Ptah-hotep," in *Primate Behavior*, is a monologue by an Egyptian mummy. "Twenty-seventh Gilgamesh," a poem in *Mount Clutter*, takes the conceit that the hero of the Sumerian epic, the oldest poem we have, is alive in the present day, the latest in an apostolic succession of mortal incarnations. Narrated by the demigod's wife, who serves tea and muffins to the endless parade of suppliants who come to him begging to know the secret of eternal life, the poem strikes a virtuosic balance between quirky and profound, domestic and cosmic. The modern Gilgamesh tells one petitioner:

()

You want all the answers? You want to die of boredom?"

()

When she uses classical science as her starting point, Lindsay doesn't freight it with showy learned allusions but rather absorbs it and transmutes it into something rich and new—the poet's main job, after all. In the first sentence of "Underground Orchids," she summarizes Empedocles' theory of the four constituent elements of the universe without mentioning him by name, and splendidly makes it her own:

Life on this planet persists in knitting its minerals into animal and vegetable variations, behaving at all times like the central point of the cosmos, and because it is water it seeks the path of least resistance and pauses sometimes to admire itself, because it is earth it might subside in camouflage or darkness or cease to move for its own good reasons, because it is air it may seem like nothing yet be the invisible sustenance of oceans or forests or a shade of blue, and because it is fire it leaps and is uncertain and leaves smelly waste and goes everywhere it can uninvited.

"Underground Orchids" was collected in Lindsay's most recent book, *Twigs* & *Knucklebones* (2008). The centerpiece of the collection is a cycle of poems called "The Kingdom of Nab." It is her most complex sustained work to date; more focused and symmetrical in its architecture than "Discovery of the Bufo Islands," it might almost be called a verse novella. Over the course of twentysix poems, Lindsay traces an imaginary Mesopotamian civilization from its legendary origin to its decline, interweaving scenes of the excavation of its ruins by several generations of fictional archaeologists, from flamboyant Baron von Hausknecht in the mid-nineteenth century, who

()

left a trail of women smitten or well amused, partridge bones and empty bottles, rumors of duels, a few of his teeth, and a newly chic fascination with ancient lands

to Tom, a contemporary excavator who complains to a colleague about a former boyfriend who ate peanut butter and pickle sandwiches and walked around their apartment flossing.

(�)

Lindsay has a pitch-perfect ear for the vernacular of the second millennium B.C. Her "translation" of Tablet 81, "Estimmag and Sililit," could, with the names changed, pass for a lost episode from the epic of Gilgamesh. The factitious fragment begins:

> To his brothers and his milk-brothers and the men of his house Estimmag said, "No one else has sworn to go to the mountains, No one else has sworn to find Sililit in her seat among the hills, To recall to her our tribute and her favor, to speak in her presence until she lifts the sickness from our houses, so it drinks our lives no more. But come with me, and I will go first, I will go before you into that land no one has seen. My foot will walk on that ground, then your feet will walk, My eye will look on that [place,] then your [eyes will look,] My mouth will taste that air, then your mouths [will taste."]

In this passage, Estimmag displays the necessary attributes of the epic savior-hero: He will go first; he will speak to the goddess as an equal; he promises to restore his mortal brothers to divine favor and dispel plague. Fragments of pseudo-epic diction lend an air of authenticity, such as "milk-brother," just the sort of coinage that scholarly papers are built on.

()

۲

In "Sparrow," a modern archaeologist, probably Tom, is kicking his heels in a trench as he waits to be evacuated because of war. He sees a sparrow hopping toward the remains of his lunch "and takes out his talismanic memory." When he was nine years old, Tom discovered the skeleton of a sparrow in his backyard, which

۲

branded his brain's back wall. It made him want to know everything. "Everything," however, wasn't listed in university catalogues.

Perhaps not, but Sarah Lindsay teaches that "everything" is the proper study of the poet as much as the scientist.

۲

JAMIE JAMES

 $(\mathbf{\Phi})$