LUCRETIUS IN EIGHTEENTH-CENTURY GERMANY.
WITH A COMMENTARY ON GOETHE’S
‘METAMORPHOSE DER TIERE’

John Ruskin, who had read Lucretius’s *De rerum natura* in his student days as a set book at Oxford, commented in later years: ‘I have ever since held it the most hopeless sign of a man’s mind being made of flint-shingle if he liked Lucretius.’¹ Such antipathy to the Roman poet was nothing new, of course, particularly towards his philosophy. Though his poetry was admired from when it first appeared around the middle of the first century B.C., his Epicureanism was unacceptable to the Stoics who so often dominated Roman philosophy. And his materialism was obnoxious to the Christians — so much so that his work was fortunate to survive the Middle Ages. But it is not just that many people have admired his poetry and rejected his philosophy. His reception is more complex than that — more complex, in fact, than that of any other classical poet I am familiar with. For the *De rerum natura* contains so many distinct and disparate strands that it has of necessity appealed in part to many, but as a whole to few. It incorporates a metaphysics of nature and a system of physical science; a moral philosophy with practical guidance on living; numerous observations on natural history; a conjectural history of human society; and a powerful statement on religion, culminating in a denial of human immortality and, to all intents and purposes, of the gods. As poetry, it is almost as varied: it contains superb lyrical passages in a descriptive, idyllic, or hymnic vein, along with tracts of abstract — and at times arid — philosophical verse, and there are fiercely satirical and polemical passages as well. Consequently, this unique composition has tended to be used over the centuries as a quarry by poets, philosophers, and scientists, rather than endorsed as a whole or imitated directly in the way that more homogeneous forms such as the elegy, epigram, satire, or ode have been.

Nevertheless, Lucretius had a particular appeal to the eighteenth century,² and the reasons for this are not hard to identify. His uncompromising intellectualism, his belief that knowledge alone — especially knowledge obtained through causal, scientific explanation — is the path to human salvation, was congenial to the post-Newtonian age. The Enlightenment’s increasing preoccupation with nature to the detriment of theology, and the immense popularity of didactic poetry as a means of disseminating the new knowledge, made his work more accessible than ever before. In Germany, however, which was generally more conservative than France or England in the century of the Enlightenment, there were greater obstacles than elsewhere to his reception — above all in religious quarters. This no doubt explains why the first complete translation of the *De rerum natura* to appear in German was not published until 1784,³ over a century after that of Thomas Creech had appeared in

England and that of Michel de Marolles in France. In fact, interest in the poem in Germany did not reach its height until the last two decades of the century, when the heyday of didactic poetry was already over.

The reception of Lucretius in France and England during the eighteenth century has been fairly fully documented. But there is not, so far as I am aware, a detailed study of his reception in Germany during that (or indeed any other) period. Such a study would have to take account of responses to Lucretius on the part of Breckes, Haller, and many lesser didactic poets such as Kästner, Creuz, and Dusch; of Frederick the Great, Lessing, Nicolai, Lichtenberg, Wieland, Thümmel, Kant, Herder, Goethe, Schiller, Heine, Schelling, and Steffens; and, if it extended further into the nineteenth century, of Hegel, Schopenhauer, Büchner, Marx, Nietzsche, and many others. The aim of this article, which is intended as a preliminary survey, is altogether more modest. (It appears to me in any case that a chronological survey of individual responses to Lucretius would be of limited value, precisely because, as I said before, his reception is so piecemeal and diversified.) The first priority, I believe, is to identify the main areas in which his influence made itself felt, and the pattern of individual responses should then become more intelligible. I shall accordingly try to define the main strands of Lucretius’s influence in eighteenth-century Germany, and then, with reference to representative individuals, to examine one or two of the more important of them more closely.

There is firstly the scientific legacy — less obvious, perhaps, in the Enlightenment than in the seventeenth century with the revival of atomism by Gassendi, Boyle, and others, but still discernible. Then there is the impact on mythopoesis and religion, in which Lucretius is hotly refuted by Christian apologists and at the same time continues to act as a subversive influence and a stimulus to freethinking. In moral

4 Titus Lucretius Carus, The Epicurean Philosopher, His Life, Work, and Writings (London, 1950); see also Gordon, p. 170 (who gives the date as 1689).

5 Michel de Marolles, Le Poète Lucrèce, latin et français (Paris, 1650); see also Gordon, p. 154. The first Italian translation was published in 1717 (Gordon, p. 147).


8 More useful in this connexion is Wolfgang Schmid, ‘Lucret und der Wandel seines Bildes’, Antike und Abendland, 2 (1946), 195–219, which, despite its general title, has more material on Germany than on other countries. Gerhard Saust, Der reisende Epikurier: Studien zu Moritz August von Thannmels Roman ‘Reise in die mittligen Provinzen von Frankreich’ (Heidelberg, 1968) contains an informative account of the revival of Epicurean ethics in eighteenth-century Germany (pp. 181–94).

9 It is clearly visible, for example, in Kant’s Allgemeine Naturgeschichte und Theorie des Himmels of 1755, and in much of Herder’s thinking on scientific matters: see my Herder and the Philosophy and History of Science (Cambridge, 1970) (hereafter Nisbet), pp. 98–100, 107, and further references under ‘Lucretius’ in the index to that work.
philosophy, he plays a part in the revival of Epicurean ethics (for example, in the hedonism of the Rococo) as a reaction to the Stoicism of the Baroque era. In the poetic sphere, there is a wave of Lucretian—or more often anti-Lucretian—poetry in the early to mid-eighteenth century. Then there is a protracted debate in Germany on the whole status and legitimacy of didactic poetry, a debate which stretching from Gottsched and Lessing to Weimar classicism and on to the Romantics and Hegel, and in which Lucretius is frequently cited as a cardinal instance. And in the closing decades of the century, the question is finally faced as to whether a new De rerum natura, incorporating a unified view of the cosmos and the findings of post-Newtonian science, can be written, and if so, by whom. It would further be instructive to consider which passages from Lucretius are most frequently quoted by German writers of the period (for example, the opening lines of Books 1 and 11), and to examine the function of such quotations. Lastly, there is the history of the first German translations of Lucretius’s poem, particularly the hexameter version by Karl Ludwig von Knebel, in the preparation of which Goethe and Herder were intensively involved; this translation, although it begun in the 1790s, was not published in its completed form until 1821. (There are also, of course, various Latin editions of the De rerum natura and philological commentaries on it during the period in question; but these belong to the history of classical scholarship rather than to the history of the poem’s reception.)

Work has been done in several of the above areas (as I have indicated in the footnotes), but rarely from the perspective of the reception of Lucretius, which is usually treated only incidentally. It is from this perspective that I propose now to look at two major areas, one philosophical, the other poetic: briefly and selectively, at the effects of Lucretius’s materialism as a threat to traditional religious values in Germany; and in more detail, at the ambitious plan, in which Goethe played a leading part, to write a neo-Lucretian epic of nature for the modern age.

Along with Spinoza, Lucretius provided the eighteenth century with one of its main models for a rigorously naturalistic explanation of all reality, and the radical Enlightenment with one of its weapons against teleological and Providential views of

9 For further comments on this reaction, see Gerhard Sauder, Empfindsamkeit, Band 1, Voraussetzungen und Elemente (Stuttgart, 1974), pp. 98–99, 104–05, and Thomas P. Saine, "Was ist Aufklärung?", in Aufklärung. Absolutismus und Bürgertum in Deutschland, edited by Franklin Kopitzsch (Munich, 1976), p. 331. See also Sauder (1968), pp. 181–94.

10 A good deal of groundwork on this area has been done by Walter Schatzberg, Scientific Themes in the Popular Literature and the Poetry of the German Enlightenment, 1720–1760 (Bern, 1973). Schatzberg comments on many Lucretian and anti-Lucretian poems of the period (see references under ‘Lucretius’ in his index), and he remarks (p. 161) on the need for a study of Lucretius in eighteenth-century Germany. See also Leif Ludwig Albertsen, Das Lehrgedicht: Eine Geschichte der antikisierenden Sachepik in der neueren deutschen Literatur (Aarhus, 1967), especially pp. 316–28 (‘Das große antimaterialistische Lehrgedicht’). Christoph Siegrist, Das Lehrgedicht der Aufklärung (Stuttgart, 1974) contains little, however, on Lucretius and his influence.


13 For bibliographical details of these, see the reference to Gordon in note 3 above.
nature and human history.¹⁴ Lucretius’s arguments against religion, immortality, and the fear of death are continually cited by the philosophes: the line *tantum religio potuit suadere malorum,*³⁵ which Lucretius deplores the superstitions that led to the sacrifice of Iphigenia, is perhaps the most frequently quoted. Such radicalism is, of course, extremely rare in Germany, at least in the first half of the century. But in 1729, in his poem *Gedanken über Vernunft, Aberglauben und Unglauben*, Albrecht von Haller does echo Lucretius’s anti-clerical sentiments and his theory that religion is a product of fear, and quotes the famous *tantum religio* . . . as a footnote to his own line: ‘Was böses ist geschehn, das nicht ein Priester tat?’¹⁶ He directs these sentiments not, however, at the Protestant faith he grew up in but at false religion (by which he means Roman Catholicism). Frederick the Great, on the other hand, had no such reservations. He described the *De rerum natura* as his breviary, to which he resorted in moments of despondency and which he carried with him on the battlefield; his own *Épître au Maréchal Keith* of 1750 is closely modelled on Book III of Lucretius’s poem, and consists of a polemic against the fear of death and the belief in immortality.¹⁷ Those didactic poets of the time who wrote poems on the natural universe in imitation of Lucretius usually took care to distance themselves from his views on Providence and religion.¹⁸ Nevertheless, some of these compositions, such as the young Wieland’s long didactic poem (his first major work) *Die Natur der Dinge* of 1751 and Friedrich Carl Casimir von Creuz’s *Lucrezische Gedanken* of 1763–64, make substantial concessions to the independent creative power of nature.¹⁹ The young philosopher Kant, in his epoch-making work on cosmogony, the *Allgemeine Naturgeschichte und Theorie des Himmels* of 1755 (the earliest statement of what later became known as the Kant–Laplace theory of stellar evolution), attempts in his preface to dissociate himself from Lucretian materialism and to uphold the doctrine of Divine Providence.²⁰ Nevertheless, he proceeds to explain the evolution of the solar system by combining Newtonian mechanics with the Epicurean theory

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¹⁴ The ideas of Spinoza are explicitly coupled with the materialism of Lucretius and Epicurus in one of the most notorious anti-religious tracts of the early Enlightenment, the anonymous *Traité des trois imposteurs*, first published in 1719 and later reissued by the Baron d’Holbach (see Pierre Retz’s edition of the *Traité* (Lyons, 1793), pp. 12, 81). La Mettric also couples the two, and is fond of citing Lucretius in support of his own materialism: see Julien Offray de la Mettrie, *OEuvres philosophiques*, 2 vols (Hildesheim, 1770), i, 214, 219, 224, and n. 209. On Lucretius and Hume, see Gay, i, 356–57.

¹⁵ *De rerum natura*, i, 101. (Subsequent otherwise unidentified references in the text by roman and arabic numerals are to book and line of Lucretius’s poem.)

¹⁶ Haller, *Gedichte*, edited by Ludwig Hirzel, 2 vols (Frauenfeld and Leipzig, 1917), ii, 53; this poem is full of Lucretian sentiments, which are countered towards the end by an appeal to Christian faith.


¹⁸ See, for example, Albertsen, pp. 152, 242–43 and Schatzberg, pp. 206, 244, 266–67.

¹⁹ As Gode-von Aesch (pp. 39–40) observes, Wieland’s poem incorporates two distinct conceptions of God, one transcendent, the other immanent; see also Wieland’s preface to the poem, where he speaks of God as the ‘Seele der Welt’ (Wieland, *Gesammelte Schriften*, edited by the Königlich Preußische Akademie der Wissenschaften (Berlin, 1909– ), Erste Abteilung, i, 7). Creuz’s poem envisages the creation of living creatures other than man by purely natural processes, and parts company with Lucretius only when it comes to the human soul: see F. C. C. von Creuz, *Oden und andere Gedichte*, 2 vols (Frankfurt a.M., 1769), ii, 199–206 (p. 217): ‘Lucrez, ich kann dein Schüler nicht mehr werden!’

of a random concourse of atoms (Kant, i, 266). His pupil Herder made copious notes from the De rerum natura in 1766, and his posthumous papers suggest that he was seriously preoccupied with philosophical materialism around this time (Nisbet, pp. 48, 100, and 126–27). In Wieland’s Geschichte des Agathon of 1766–67, Epicureanism has become a central theme: the hero Agathon is plagued by doubts concerning Providence, doubts which are reinforced by the arguments of the Sophist Hippias, who adopts a Mephistophelean role in undermining the young hero’s Platonic idealism. Hippias is an Epicurean; his doctrines of the soul’s mortality, of random creation by the movement of atoms in space, his contention that religion is based solely on fear and that the gods, if they exist at all, are indifferent to human affairs — all this is Epicurean philosophy, taken for the most part from Lucretius (who is mentioned or alluded to on several occasions). Hippias’s philosophical position is never properly refuted either by Agathon or by the narrator; it is only his thorough-going hedonism, that dedication to sensual pleasure which has been popularly known for centuries as ‘Epicureanism’ (and which goes far beyond anything to be found in Lucretius), that is decisively rejected. In an age in which Christian doctrine was being steadily eroded, it is the moral rather than the theological position which, as in so many other writers of the time, remains firm. Agathon’s philosophical and religious uncertainty, however, suggests that Wieland’s earlier efforts to refute Lucretius in his poem Die Natur der Dinge had by no means silenced his own doubts on such matters. It is also worthy of note that, in Wieland’s later novel Die Abderiten of the 1770s, the only positive character described at length in a society of fools is the atomistic philosopher Democritus, the direct intellectual ancestor of both Epicurus and Lucretius.

It seems that nearly every major writer in Germany around this time had his crises of faith and doubts concerning Providence. When such crises occur, it is often either Lucretius or Spinoza who provides the unsettling influence. Schiller is no exception. His early poem ‘Die Pest’, published in 1782, describes the horrors of the plague in a way which recalls the vivid account of the plague in Athens with which Lucretius (vi, 1138–1286) concludes his work. Schiller’s poem ends with the bitterly ironic comment on Providence: ‘Schröcklich preiset Gott die Pest.’ The young Goethe’s most famous outburst against the gods, his poem ‘Prometheus’, is full of the Lucretian spirit of religious defiance; its opening challenge to Zeus to practise his thunderbolts on oaks and mountain-tops like a boy beheading thistles is, I suspect, an allusion to those lines in Book vi of the De rerum natura in which Zeus and the other gods are ridiculed, and thereby denied, for wasting their projectiles on obviously random targets:

Why... do they [the gods] aim at deserts and waste their labour? Or are they then practising their arms and strengthening their muscles?... And why does he [Jupiter] generally attack high places, why do we see most traces of his fire on the mountain-tops?22

1 Wieland, Geschichte des Agathon (Erste Fassung), edited by Fritz Martini (Stuttgart, 1979), p. 36 (doubts on Providence), pp. 58–60, 89 (Hippias’s Epicureanism), and pp. 183, 405 (references to Lucretius and to De rerum natura, ii, 14). The narrator’s description of Hippias’s calm on seeing Agathon’s passions boil over (‘Der Sophist sah diesem Sturm...zu, so ruhig, wie einer der vom sichern Ufer dem wilden Aufruhr der Wellen zusieht, dem er glücklich entgangen ist’ (p. 339)) is a paraphrase of the celebrated passage in De rerum natura, ii, 1–4.
2 Friedrich Schiller, Anthologie auf das Jahr 1782, edited by Katharina Mommsen (Stuttgart, 1973). As the editor, who also notices the influence of Spinoza in the early poems, remarks: ‘Das Vorbild war Lucrez’ (pp. 18–19).
And in 1789, Goethe declares in a letter to Stolberg, 'daß ich . . . für meine Person an der Lehre des Lucrez mehr oder weniger hänge und alle meine Prätensionen in den Kreis des Lebens einschließe'.

Lucretius, along with Spinoza, is one of the chief inspirations of that consistent naturalism which Goethe professes in his classical period at the time when his scientific studies were at their height. He constantly discussed Lucretius with his friend Knebel, who was translating the poem, and himself planned to write a long essay on the subject (Grumach, i, 348–49). He wrote a warmly appreciative review of Knebel's translation when it appeared in 1821 (Grumach, i, 346–48), but, since he became increasingly attached in his later years to a belief in some kind of personal immortality, he now felt obliged to distance himself from Lucretius's polemics against the fear of death. He did so in a humorous manner, likening them to Frederick the Great’s outburst at the Battle of Kolin to a group of his grenadiers who hesitated to mount a frontal assault on an enemy battery: 'Ihr Hunde, wollt ihr denn ewig leben!' (p. 348).

Even from these scattered examples, it is apparent that Lucretius provided a constant encouragement to secular ways of thinking in the second half of the eighteenth century in Germany. None of the major thinkers of the time adopted his philosophy as a whole, of course; it simply helped to undermine the Christian beliefs they had inherited. There are, however, at least two lesser-known figures who became thorough-going philosophical materialists, and both were members of the Weimar circle. One is Knebel, the translator of Lucretius, whose posthumous essays 'Über Unsterblichkeit', 'Betrachtungen zum Lucretz', and 'Atheismus' fully endorse the Epicurean philosophy. The other is August von Einsiedel, an eccentric figure whose unpublished reflections on atoms and the struggle for existence Herder copied out for his private use. And when, in the nineteenth century, materialism finally came out into the open in Germany, its classical origins were still evident. The young Karl Marx wrote his doctoral dissertation on Democritus and Epicurus and their philosophies of nature. His strong sympathy with Epicurus, and with his most eloquent disciple, Lucretius, is evident throughout.

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24 Goethe to F. L. von Stolberg, 2 February 1789, in Ernst Grumach, Goethe und die Antike. Eine Sammlung, 2 vols (Berlin, 1949), i, 348–49. All of Goethe’s explicit comments on Lucretius are assembled in Grumach, i, 335–52. Karl Bopp, 'Goethe und Lucretz'. Jahrbuch der Goethe-Gesellschaft, 12 (1926), 47–67 is largely a list of Goethe’s references to Lucretius, but some of the Lucretian allusions in Goethe’s writings are also noted.


26 See August von Einsiedel, Iden, edited by Wilhelm Dobrak (Berlin, 1957); as Dobrak observes, 'Am Anfang steht bei August von Einsiedel sein Bekenntnis zu Demokrit, dem bedeutendsten Repräsentanten der materialistischen Philosophie im alten Griechenland' (p. 11).

27 See 'Über die Differenz der Demokratischen und Epikurischen Naturphilosophie', in Karl Marx, Frühe Schriften, edited by Hans-Joachim Lieber and Peter Forth (Stuttgart, 1962), i, 18–106; also S. S. Prawer, Karl Marx and World Literature (Oxford, 1976), who observes that Epicurus and Lucretius were for Marx 'a lever that might help to dislodge simplistic religious beliefs' (p. 27).
So much for Lucretius as a subversive philosophical influence. I want to consider now the poetic issue of neo-Lucretian experiments and the plan for a new De rerum natura for the modern age.

The philosophico-scientific poem is one of the most characteristic poetic genres of the eighteenth century (Spencer, p. 137). The aim of such poetry, especially in the first half of the century, is to reconcile the findings of modern science and natural philosophy with Christian theology, usually by means of the argument from design. All such poems, from Sir Richard Blackmore’s Creation of 1712 to Charles Claude Genest’s Principes de philosophie of 1716 and Barthold Hinrich Brockes’s nine-volume collection Iridisches Vergnügen in Gott’s 1721–48, are anti-Lucretian works, whether or not Lucretius is explicitly mentioned in them (as he frequently is). Of those which are specifically directed against Lucretius’s poem, and consciously modelled on it as their formal archetype, the most celebrated at the time was Cardinal de Polignac’s Latin Anti-Lucretius, published posthumously in 1747. Polignac conceived the idea of his poem around the beginning of the century, possibly after an argument about Providence with the French sceptic Pierre Bayle. Despite its title, it is directed mainly against modern thinkers such as Hobbes, Spinoza, Locke, Gassendi, and — unfortunately for the later reputation of Polignac, who was a Cartesian in scientific matters — Isaac Newton. It is probable that Polignac’s poem gave Wieland the idea of writing his own Die Natur der Dinge of 1751, for Polignac is extravagantly praised in that work. These poems, despite their Lucretian trappings (Wieland, for example, invokes Minerva and Clio, in parallel to Lucretius’s invocations of Venus and Calliope), are little more than versified philosophy. Mercifully, Wieland’s poem (of which he was later ashamed) contains a mere 4,177 lines, as against the 7,415 lines of Lucretius himself and the 11,931 lines of Polignac’s (albeit unfinished) poem.

Such versified treatises and rhyming encyclopaedias of natural history helped to bring the long didactic poem into disrepute. It was condemned by Lessing, and by others down to the time of Hegel, as unpoetic. Even Goethe and Schiller, although they wrote didactic poetry themselves, joined in the criticism; they did, however, leave the way open for a didactic poetry which might overcome the defects of past attempts. The ultimate authority behind all such condemnations was, of course,

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28 This anecdote is reported, for example, Johann Jakob Dusch, Briefe zur Bildung des Geschmacks, 6 vols., revised edition (Leipzig, 1777), ii, 118. The first two volumes of this work deal solely with didactic poetry, and the long section on Lucretius (Vol. ii, Letters 1–3) translates substantial parts of the De rerum natura into German prose. For further details on Polignac, see Wolfgang Bernard Fleischmann, ‘Zum Anti-Lucretius des Kardinals de Polignac’, Romanische Forschungen, 77 (1965), 42–63.


33 Goethe’s criticisms of the genre in ‘Über das Lehrgedicht’ (1825) are by no means unqualified, and his own plan of 1799 to write a great epic of nature shows considerable faith in its possibilities (Briefwechsel zwischen Goethe und Knebel, 1774–1829), edited by G. E. Gehrard, 2 vols. (Leipzig, 1851), i, 210, Goethe to Knebel, 22 January 1799). Similarly, Schiller, in condemning Erasmus Darwin’s Botanic Garden (Schiller to Goethe, 30 January 1798), adds ‘Ich glaube übrigens nicht, daß der Stoff unzulässig und für die Poesie ganz ungeschickt ist’, and goes on to suggest how such a poem might be successfully accomplished.
Aristotle, who had denied that the philosophical verse of Empedocles was poetry (Poetics, Chapter 1). Herder, however, had a more favourable opinion of the genre, and he took issue directly with Aristotle in its defence: characteristically, he employed the historical argument that poetry has evolved further since Aristotle’s time, so that Aristotle’s strictures are not applicable to more recent forms. The latter include the work of Lucretius himself, who is always for Herder the supreme example of the didactic poet.\(^3^4\) While he was still a student, he even planned himself to write what he called ‘eine philosophische Epopee über die menschliche Seele’\(^3^5\) — that is, on psychology. But he soon abandoned this scheme — Herder’s poetic talents were modest — and began to call on others to make the discoveries of modern science the subject of a new Lucretian poem (SW, I, 470; V, 295, 320; XXIII, 247; etc.). In 1801, he put forward the suggestion, which Schelling soon afterwards developed at length, that scientific systems have an inherently poetic quality which makes them especially suitable for poetic treatment: ‘jedes System ist selbst ein Poem, so fern es mit sich bestehend, ganz und rein ist’ (SW, XXIII, 243; see also XI, 293 and XXIV, 296).

It is indeed remarkable how often terms such as ‘Dichtung’, ‘Poesie’, and even ‘Roman’ are applied to scientific theories in the eighteenth century in Germany — often, but by no means always, pejoratively. But the idea that scientific systems may have an inherently poetic quality is perhaps more comprehensible in relation to the sciences of those days than to the exact sciences of today. Those which attempted to explain the history of the earth or the universe, for example, are often vivid, imaginative reconstructions of cosmic events and processes, comparable in some respects to the science fiction of today. This is true of such works as William Whiston’s New Theory of the Earth, in which the earth’s origin and Noah’s Flood are explained as the effects of a comet passing close to the sun, and of later versions such as the cosmogony of Buffon, whose Époques de la nature (1778) contains equally bold speculations on earth history, and seemed fantastic to many of his contemporaries. It was perhaps in France that the word ‘roman’ was first applied to imaginative theories of the universe; Meunier de Querlon, in 1777, applied it to the De rerum natura itself, which he described as ‘le roman physique de Lucrèce’ (Fusil (1930), p. 163). In 1780, Goethe finds the word quite appropriate to Buffon’s Époques, which he praises for its comprehensiveness:

weiswegen auch Franzosen und Teutschfranzosen und Teutsche sagen, er habe einen Roman geschrieben, welches sehr wohl gesagt ist, weil das ehrsame Publicum alles außerordentliche nur durch den Roman kennt.\(^3^6\)

This use of the word ‘Roman’ to denote an imaginative, systematic account of the world’s origins explains what Goethe must have had in mind when he planned, in the early 1780s, to write a ‘Roman über das Weltall’, it seems to have been conceived

\(^3^4\) Herder, Sämtliche Werke (SW), edited by Bernhard Suphan, 33 vols (Berlin, 1877–1913), IV, 282, 290. Herder’s debt to Lucretius is analysed more fully in my forthcoming article ‘Herder und Lukrez’, to appear in the proceedings of the conference on Herder held at Saarbrücken in 1984, edited by Gerhard Sauder for the Felix Meiner Verlag (Hamburg).


\(^3^6\) Goethe to Merck, 11 October 1780, in WA, IV, Abteilung, IV, 311; but see also the letter to Merck of 7 April 1780 (IV, 204), where he objects to others dismissing Buffon’s work as ‘eine Hypothese oder ein Roman’. Compare Herder’s pejorative use of the term a few years earlier (SW, VII, 17), when he speaks of ‘Buffons Romane der Thiererzeugung’ (see also Nisbet, p. 306).
as an imaginative account of earth history, possibly in letter form, and the highly poetic essay Über den Granit of 1784 may have been connected with it. It was never written, of course. But it is possible that the novel Die Wahlverwandtschaften of 1809, in which fundamental human relationships are likened to basic chemical reactions so as to suggest that all of nature is a single, unitary whole, is, in its conception, a late echo of the earlier project.

By the 1790s, after repeated promptings by Herder, Knebel had begun to translate Lucretius. Goethe in turn began, with Knebel’s encouragement, to consider ways of expressing his own scientific ideas in poetry. One of his earlier attempts is probably the curious fragment entitled ‘Jussieu Klassen der Pflanzen’, a kind of mnemonic which, before breaking off in the middle of the fourteenth line, classifies the main families of plants as defined in Antoine Laurent de Jussieu’s botanical system of 1789. The first seven lines set the pattern for the rest:

Zum bequemen Gedächtniß der 15 natürlichen Classen
Wie sie uns Jussieu gibt, versucht ich folgende Verse.
Ohne Samenstück keimen: die Schwämme, die Algen,
Und die übrigen Moose, die Farren und die Najaden.
Einfach ist der Saamenkern und die Stamina
Stehen über der Frucht in einfach blühender Blume
Als der Arums, der Typhen, der Cyperos und die Gräser.

(WA, i. Abteilung, v(2), 405)

No date is given for this fragment in the Weimar edition, but it may well have been written in 1793, when Goethe acquired a copy of Jussieu’s work, or in 1794, when he laid out his garden in flowerbeds corresponding to Jussieu’s classification. The metre is that of Lucretius, the hexameter, and the subject is natural history. But the enumerative presentation recalls the encyclopaedic verse of the first half of the century rather than the De rerum natura.

The next step comes with the elegy ‘Die Metamorphose der Pflanzen’, written in June 1798, which expresses Goethe’s botanical theories in poetic form. But although it has some Lucretian touches, it is for several reasons (apart from its brevity) not a Lucretian poem. The ideas in it, especially the central idea of plant growth as the successive transformation of an archetypal, leaf-like organ, are very much Goethe’s own; its metre is the elegiac couplet, not the Lucretian hexameter; and it has the quality of a personal love lyric. It is addressed to the poet’s beloved, and the climactic moment of plant growth, the moment of reproduction (ll. 55–58), becomes a symbol and reaffirmation of their love (ll. 71–80). Besides, its poetic affinities are modern rather than classical. A few months before he wrote it, Goethe, in a letter to Schiller, had strongly criticized another botanical poem, Erasmus Darwin’s The Botanic Garden, whose second section, ‘The Loves of the Plants’, was published in 1789. He found it poetically inadequate, and overloaded with prosaic factual detail.

39 See Goethe, Begegnungen und Gespräche, edited by Ernst and Renate Grumach (Berlin, 1965–), iv, 107: the botanist F. G. Dietrich reports on the work done in 1794.
Schiller agreed, calling it 'in Verse gebrachte Gelehramkeit', but added that he considered the material capable of genuinely poetic treatment.\(^{41}\) The elegy 'Die Metamorphose der Pflanzen', with its erotic associations and nuptial imagery, looks much more like a poetic riposte by Goethe to Darwin's 'The Loves of the Plants' than an attempt to write Lucretian poetry. To cite only one example, the climax of Darwin's poem, as of Goethe's, is a multiple wedding, in which the stamens and pistils within the flower unite to produce the seed. But whereas Goethe's version, though poetically heightened, bears a clear relation to the botanical process it describes, Darwin's (characteristically lubricious) lines require a learned footnote to remind the reader that it is floral reproduction rather than human promiscuity that is referred to. The German text reads like a corrective to the English:

\[
\begin{align*}
\text{Und zusammen zieht es sich schnell; die zärtsten Formen,} \\
\text{Zwiefach streben sie vor, sich zu vereinen bestimmt.} \\
\text{Traulich stehen sie nun, die holden Paare, beisammens,} \\
\text{Zahlreich ordnen sie sich um den geweihten Altar.} \\
\text{Hymen schwebet herbei, und herrliche Dürfe, gewaltig,} \\
\text{Strömen süßen Geruch, alles belebend, umher.} \\
\end{align*}
\]

(\(^{1}\) 51)

Pair after pair, along his sacred groves
To Hymen's lane the bright procession moves;
\ldots.
On wings of gossamer soft Whispers fly,
And the sly Glance steals side-long from the eye.
— As round his shrine the gaudy circles bow,
And seal with muttering lips the faithless vow,
Licentious Hymen joins their mingled hands,
And loosely twines the meretricious bands.—\(^{42}\)

Encouraged by the warm reception which 'Die Metamorphose der Pflanzen' received among his friends, Goethe began to consider the much vaster project of a Lucretian poem for the modern age. Knebel urged him to use the hexameter, and Goethe declared that he hoped to use Knebel's translation of Lucretius, which was now well advanced, as the basis for his own poem.\(^{43}\) He did not write it, of course. Nor did he write the poem on magnetism he planned in the same context.\(^{44}\) But he did write the poem 'Metamorphose der Tiere', traditionally dated 1806, but probably written by 1800 at the latest. As Erich Trunz points out, Goethe abandoned his plan for a Lucretian poem in 1800, and he was also turned against using the hexameter around this time by the carpings of metrical purists such as Johann Heinrich Voss and August Wilhelm Schlegel; hence it is improbable that he would have written the poem after that date (HÄ, 1, 546–47, 573, and 585–86). (Besides, the editors of the Weimar edition comment that a surviving draft of the poem is 'der Schrift und der Beschaffenheit des Papiers nach vielleicht den 90er Jahren angehörig' (WA, 1. Abteilung, III, 549–50).)

\(^{41}\) See Goethe to Schiller, 26 January 1798, and Schiller to Goethe, 30 January 1798, in Briefwechsel zwischen Schiller und Goethe, edited by Franz Müncker, 4 vols (Stuttgart, 1892), iii, 26–30; see also the quotation from Schiller's letter in note 33 above.


\(^{43}\) See Knebel to Goethe, 18 July 1798, and Goethe to Knebel, 22 January 1799, in Briefwechsel zwischen Goethe und Knebel (1774–1832), edited by G. E. Gethauser, 2 vols (Leipzig, 1851), i, 182, 201.

\(^{44}\) See Goethe to Knebel, 16 July 1798, in Briefwechsel zwischen Goethe und Knebel, i, 181.
The ‘Metamorphose der Tiere’ (HA, 1, 201–03) is Goethe’s closest approximation to Lucretian poetry — a good deal closer, I believe, than has yet been realized. It is complete in itself; but its opening lines suggest that it was intended to form part of a longer poem, for they seem to presuppose an earlier consideration of lower forms of nature before the animal kingdom is dealt with:

Wagt ihr, also bereitet, die letzte Stufe zu steigen
Dieses Gipfels, so reicht mir die Hand und öffnet den freien
Blick ins weite Feld der Natur.

(HA, 1, 201)

The following lines personify nature as a mother-goddess, herself immortal, who has lavished her gifts of life in profusion (ll. 3–4). This brief evocation of nature is, in fact, a shorter equivalent of the apostrophe to Venus as the procreator of all things at the beginning of the De rerum natura (1, 1–20). The mother-goddess, Goethe continues, has no need to worry over the needs of her creatures, for which she has amply provided (ll. 4–9); Lucretius similarly declares: ‘for them all the earth herself brings forth all they want in abundance, and nature the cunning fashioner of things’ (v, 233–34). Goethe’s manner, after this preamble, is expository: there follows a poetic account of some of his theories of animal form. The first of these — ‘Zweck sein selbst ist jegliches Tier’ (l. 12) and ‘Also bestimmt die Gestalt die Lebensweise
des Tieres’ (l. 25) — is a restatement of Lucretius’s repudiation of teleology: animals are not created for a purpose; their purpose is a natural consequence of their shape. As Lucretius expresses it: ‘Nothing is born in us simply in order that we may use it, but that which is born creates the use’ (iv, 834–35). Constant laws, Goethe adds, govern the development of all natural forms (ll. 14–15), and these naturally imposed limits are inviolable (ll. 31–32):

Alle Glieder bilden sich aus nach ew’gen Gesetzen,
Und die seltenste Form bewahrt im geheimen das Urbild.

... Diese Grenzen erweitert kein Gott, es ehrt die Natur sie;
Denn nur also beschränkt war je das Vollkommene möglich.45

(The term ‘Urbild’ clearly alludes to Goethe’s theory of an osteological ‘Typus’ to which all vertebrates conform, but no technical details are supplied concerning the number and disposition of bones; the formulation remains general, and the emphasis is simply on the law-governed nature of animal growth.) Again, there are comparable passages in Lucretius: ‘A limit has been fixed for the growth of things after their kind and for their tenure of life, and... it stands decreed what each can do by the ordinances of nature, and also what each cannot do’ (1, 584–88; see also v, 923–24 and vi, 65–66). After citing a few examples of harmonious animal organization, Goethe concludes that the limits of a given animal are never mutually incompatible:

... alle lebendigen Glieder
Widersprechen sich nie und wirken alle zum Leben

(l. 23)

He subsequently reinforces this point, declaring that monstrous hybrids such as horned lions are impossible (ll. 46–47). For these observations, there are again precedents in Lucretius:

45 The closeness of these lines (and of lines 50–52) to the sentiments expressed in the sonnet ‘Natur und Kunst’ of 1800 provides further evidence for dating the poem to around the turn of the century, rather than to 1806.
But Centaurs never existed, nor at any time can there be creatures of double nature and twofold body combined together of incompatible limbs . . . there is no proof that creatures of mixed growth could be made, and limbs of various creatures joined into one.

(v, 878–80 and 918–19)

In the ceaseless battle between forces of destruction and preservation, the latter succeed in holding their own (ll. 33–35); for this point too, there are parallels in Lucretius (for example, ii, 569–70).

There is indeed scarcely a sentiment in the first three-quarters of Goethe’s poem that does not have its counterpart in the 
De rerum natura
(although the examples used to illustrate the matching principles are often different). There is also, in ‘Metamorphose der Tiere’, that same sense of confidence and certainty which Lucretius derives from the universal rule of natural law. But no less significant than what Goethe includes in his poem is what he excludes from it. For whereas ‘Die Metamorphose der Pflanzen’ had closely followed the doctrines contained in Goethe’s botanical treatise on the metamorphosis of plants, even presenting them in the same sequence (see note 40 above), one of Goethe’s most important zoological theories (the ‘Wirbeltheorie des Schädels’, according to which the vertebrate skull is composed of modified vertebrae) finds no place at all in the zoological poem or in its original draft; and another (that of the osteological ‘Typus’ for all vertebrates) is alluded to only in the most general terms (l. 15). They are also absent, of course, in Lucretius’s poem. But the two principal theories which Goethe does include (that animals and their organs are not teleologically determined, and that specialization in one function rules out specialization in others) both have parallels in Lucretius. The second of these theories, sometimes referred to as the law of ‘compensation’ or of the ‘correlation of parts’, is regularly enunciated in Goethe’s scientific writings with the help of commercial metaphors: a limited budget (Elag, Budget, Haushalt) of resources is available to each animal species, within which ‘keinem Teil etwas zugelegt werden könne, ohne daß einem andern dagegen etwas abgezogen werde’ (HA, xi, 176). And indeed, such metaphors (gespart, Wage, Aufwand) are also present in the first draft of ‘Metamorphose der Tiere’ (WA, 1. Abteilung, lii, 549–52). But significantly, they are absent from the final version of the poem. It would therefore seem that Goethe modelled his poem, at least up to line 49, very closely indeed on Lucretius — so much so that only such ideas and formulations as are compatible with the De rerum natura are included, and the rest either omitted or expressed in the most general of terms. And even if it were objected that the poem is, in a sense, a fragment, and that we cannot therefore decide what Goethe might have added to it, there is no evidence to suggest that he at any time planned to include in it further zoological doctrines: the first draft contains no theories which are not also present in the final version; the opening lines suggest that whatever might have preceded them would have concerned natural forms of a lower order than the vertebrates (‘die letzte Stufe zu steigen’); and the conclusion, as I shall shortly argue, precludes a return to the specifics of zoology. In short, from the initial evocation of the goddess (l. 3) to the rejection of monstrous hybrids (ll. 44–49), the idiom and substance of Goethe’s poem are eminently Lucretian. It is, indeed, a Lucretian poem on modern (Goethean) science — but only in so far as modern science can be made to resemble the science of Lucretius himself.

46 See, for example, Rudolf Magnus, Goethe as a Scientist, new edition (New York, 1949), p. 84.
Yet despite these close affinities, the differences between the two poems are profound. Where Lucretius is expansive and discursive, Goethe is selective and concentrated. He deals not with the entire natural world, as Lucretius had done, but only with zoology; and even his own zoological theories are not comprehensively covered. Nevertheless, 'Metamorphose der Tiere' is a complete poem — no less complete than 'Die Metamorphose der Pflanzen'. For in both of these poems, the function of the main, descriptive section is not to provide a comprehensive account of botany or of zoology, but merely to lay the basis for a broader concluding statement on nature and man — a personal statement on love as a creative principle in the first poem, and a more general statement on law and freedom throughout nature in the second:

\[
\text{Dieser schöne Begriff von Macht und Schranken, von Willkür} \\
\text{Und Gesetz, von Freiheit und Maß, von beweglicher Ordnung,} \\
\text{Vorzug und Mangel erfreue dich hoch!} \\
\text{(l. 50)}
\]

The first part of the poem contains all that is necessary to support this conclusion, so that further zoological detail would have been superfluous. Goethe then widens the scope of his conclusion even further, to encompass human morality, practical activity, art, and politics:

\[
\text{Keinen höheren Begriff erringt der sittliche Denker,} \\
\text{Keinen der tätige Mann, der dichtende Künstler; der Herrscher,} \\
\text{Der verdient, es zu sein, erfreut nur durch ihn sich der Krone.} \\
\text{(l. 54)}
\]

In other words, from his observations on zoology, Goethe has moved at once to the highest level of generalization on man and the universe. But there is no such climactic summation in the \textit{De rerum natura}. Lucretius moves continually to and fro between general principles and empirical illustrations, so that his work attains an epic breadth which is foreign to Goethe's concentrated didacticism. There is also, in the next three lines of Goethe's poem, a degree of optimism and jubilant faith in man that is absent from Lucretius's sombre reflections on the universal struggle for existence:

\[
\text{Freue dich, höchstes Geschöpf, der Natur! Du fühltest dich fähig,} \\
\text{Ihr den höchsten Gedanken, zu dem sie schaffend sich aufschwang,} \\
\text{Nachzudenken.} \\
\text{(l. 57)}
\]

The beginning of Goethe's poem certainly seemed to presuppose an earlier section within a longer poem on nature. But the ending, in which the reader is invited to look backwards, not forwards, makes it difficult to imagine how it could have continued beyond this point:47

\[
\text{Hier stehe nun still und wende die Blicke} \\
\text{Rückwärts, prüfe, vergleiche und nimm vom Munde der Muse,} \\
\text{Daß du schauest, nicht schwärmst, die liebliche volle Gewißheit.} \\
\text{(l. 59)}
\]

\[
47 \text{For this reason, I find it difficult to agree with Erich Trumz's remark (HA, 1, 585): 'Sowohl der Anfang \textit{als auch das Ende} [my italics] weisen auf Zusammenhänge eines größeren Werkes.' The only natural continuation would be further reflections on the place of man within the universe. Besides, the reference to the Muse at the end refers back to that in lines 52–53 rather than forward to what the Muse might say in the future.}
\]
The first part of this poem (up to line 49) represents Goethe's only sustained attempt at writing Lucretian verse. But in concluding it in the way he did, he denied himself the possibility of developing it into a truly Lucretian work. He opted instead for a shorter analogue of the Lucretian poem, whose structure is foreshadowed in that of 'Die Metamorphose der Pflanzen': a few, largely concrete, observations on the natural world are invested, in an abstract and general conclusion, with symbolic and universal significance. He already shows that predilection for the shorter didactic statement, dealing with a few representative phenomena, which becomes characteristic of his later poetry on nature and science. There are, admittedly, further echoes of Lucretius in his later poems;⁴⁸ but they never again approximate so closely to the Lucretian model as does the first part of 'Metamorphose der Tiere'. The scientific poems in the sixth book of _Zahme Xenien_ (1826), for example, are dense, gnomic, and epigrammatic. And most of the philosophical poems in the collection 'Gott und Welt', published in 1827, are far closer in character to the concluding lines of 'Metamorphose der Tiere' than to its earlier, Lucretian section: they are the concentrated utterances of a sage rather than the systematic teachings of a scientific didacticist, and their tone is more often lyrical than expository. Nevertheless, Goethe remains closer in his attitudes to Lucretius than to Brockes, Haller, and the other didactic poets of the earlier eighteenth century in Germany: his world, like that of the Roman poet, is a unitary whole, in which God, nature, and man are one. But as he told Sulpiz Boisserée in 1815,⁴⁹ he now believed that a single long poem on nature was impracticable, and he contented himself with assembling various of his shorter poems on nature and science into the balanced collection 'Gott und Welt'. Thus, although his later ideas on the natural universe did go into his poetry, it was not the poetry of a new Lucretius.

In 1800, Goethe gave up his plan for a great epic of nature, and made it over to the young philosopher Schelling. He doubtless knew what he was doing: Schelling's poetic gifts were minimal, and what little survives of his neo-Lucretian efforts is eminently undistinguished. This is the case with the poem 'Tier und Pflanze', probably written in 1800; it is a lame take-off, in elegiac couplets, of Goethe's 'Die Metamorphose der Pflanzen', attempting as it does to associate natural history with the relations between man and woman. It is also, as the following lines show, a crass example of male chauvinism, associating woman with vegetable passivity and man with animal freedom:

Pflanzennatur auch gab sie [die Natur] dem Weib: ich nenn' es die Pflanze
Unter den Tieren, den Mann unter den Tieren das Tier.
Zarter ist Liebe des Weibs, notwendiger, stiller, auch kürzer;
Tierischer, freier, allein daurender liebt auch der Mann.⁵⁰

Further studies of Dante and his verse-form pettered out in translations and fragments, and Schelling in turn abandoned the plan (as did the Danish philosopher Heinrich

⁴⁸ For example, as Bapp ('Goethe und Lukrez', p. 66) notices, the poem 'Howards Ehrengedächtnis', published in 1820, echoes Lucretius's description of cloud shapes (ix, 120–42), and its eulogy of Howard recalls Lucretius's eulogies of Epicurus. T. J. Reed's description, in _The Classical Centre: Goethe and Weimar 1775–1832_ (London, 1980), p. 238, of the 'Klassische Walpurgnacht' in _Faust_ as 'a new De rerum natura' applies to the scope and spirit of the dramatic pageant rather than to its form; the refutation of Anaxagoras by Thales, however, recalls Lucretius's refutation of Anaxagoras in _De rerum natura,_ 1, 890–920 (see Bapp, p. 66).


Schelling did attempt, however, to discuss the philosophical and aesthetic implications of the project, and to explain why past initiatives had invariably failed. He does so in his \textit{Philosophie der Kunst} of 1802–03, in the section on the didactic poem.\footnote{Werke, 3. Ergänzungsband (1959), pp. 309–18.} His argument is complicated, but it runs in essence as follows. The didactic poem, which has a specific end, namely, to impart knowledge, is not properly an art-form, since art must have universality and not be tied to any particular purpose. But knowledge itself possesses universality if it is total knowledge — that is, if it is a complete reflection of the universe. Thus the only didactic poem which will be truly artistic in this sense will be one, as Schelling puts it, ‘in welchem unmittelbar oder mittelbar das All selbst, wie es im Wissen reflektiert wird, der Gegenstand ist’. He continues: ‘Da das Universum der Form und dem Wesen nach nur Eines ist, so kann auch in der Idee nur Ein absolutes Lehrgedicht sein, von dem alle einzelnen bloße Bruchstücke sind, nämlich das Gedicht \textit{von der Natur der Dinge}’ (p. 315). All didactic poems of the past, including that of Lucretius, are, of necessity only partial, since they are based on partial knowledge. Lucretius, for example, reduces the world to material particles, thereby ignoring the dimension of spirit. Schelling then concludes (echoing Schiller’s \textit{Über naive und sentimentalische Dichtung}):\footnote{See Schiller, \textit{Werke}, Nationalausgabe, xx, 453: ‘Dasjenige didaktische Gedicht, worin der Gedanke selbst poetisch wäre, und es auch bliebe, ist noch zu erwarten.’} ‘Dasjenige Lehrgedicht also, wo . . . das Darzustellende selbst poetisch ist, ist noch zu erwarten’ (p. 317). In other words, the absolute didactic poem, the modern \textit{De rerum natura}, still lies in the future, for our knowledge of the universe is as yet incomplete.

Schelling now builds into his argument that observation which Herder had made shortly before (see p. 104, above) when he maintained that a complete system of knowledge is itself inherently poetic. Once human knowledge is complete (that is, once it has achieved identity with the universe) the world-spirit will, as it were, itself generate the absolute didactic poem, and a new mythology to go along with it. Schelling concludes:

\begin{quote}
Der Ursprung des absoluten Lehrgedichts oder des speculativen Epos fällt also mit der Vollendung der Wissenschaft in eins zusammen, und wie die Wissenschaft erst von der Poesie ausging, so ist es auch ihre schönste und letzte Bestimmung, in diesen Ocean zurückzufließen.
\end{quote}

Art is thus both the original source and the ultimate destination of knowledge (a view which Schiller had already expressed in his didactic poem ‘Die Künstler’ of 1789).\footnote{See Schiller’s comments on this poem in his letter to Körner of 9 February 1789, in \textit{Briefwechsel zwischen Schiller und Körner}, edited by Klaus L. Bergmann (Munich, 1973), pp. 100–01: ‘Nachdem also der Gedanke . . . ausgeführt ist, daß die Kunst die wissenschaftliche und sittliche Kultur vorbereitet habe, so wird nun gesagt . . . dann erst sei die Vollendung des Menschen da, wenn sich wissenschaftliche und sittliche Kultur wieder in die Schönheit auflöse.’} But what the new mythology which the progress of knowledge will eventually generate will look like, Schelling does not say.
Schelling’s argument no doubt made him feel better about his failure to carry out the project that Goethe had handed over to him. But what he says is more than just a personal apology. Whereas Goethe had settled for less than the original plan — for a collection of shorter poems on nature and science — Schelling claims that the plan is in principle impossible to fulfil, at least for the foreseeable future. He prices it, so to speak, right out of the market. History, of course, has so far proved him right. The closest approximation to the modern epic of nature is perhaps Alexander von Humboldt’s *Kosmos*, which reviews all of nature as an organic whole, and pays tribute to Goethe’s aspiration to reintegrate poetry, philosophy, and science. But *Kosmos* is written in prose, not verse, and its formal ancestor is not Lucretius’s *De rerum natura* but Herder’s *Ideen zur Philosophie der Geschichte*, which tried to present an integral vision of the natural world and of human history.

Nevertheless, Schelling’s explanation of why ‘das absolute Lehrgedicht’ has never been written is not, to my mind, either complete or satisfactory. Nor is his secondary argument — of which the Romantics were particularly fond — that it was the lack of a new mythology that hampered modern scientific poets. In the most successful didactic poem of the past, the *De rerum natura*, mythology is in fact used quite sparingly, and it is clear that Lucretius regards the classical myths only as poetic figures: he specifically denies that the gods perform any function whatsoever in the natural universe (II, 1090–92). His main subject is the dynamic process of nature itself. (Schelling simply betrays his own failure to appreciate the *De rerum natura* when he declares (p. 316) that only the opening hymn to Venus and the eulogies of Epicurus, which display ‘persönliche Begeisterung’, are truly poetic.) One of the nearest things we have to a modern myth of the universe as a self-contained, natural system is that of the *Erdgeist* in Goethe’s *Faust*, Part I; and some critics have regretted that Goethe did not develop this further, but overlaid it instead with the old dualist, Christian framework of a transcendent God in the ‘Prolog im Himmel’ (see, for example, Reed, p. 136). It may well be that *Faust* would have been an even more impressive play, more in tune with modern sensibilities, if he had stuck to his original myth. But didactic poetry on scientific themes is a different matter. For good mythology tends to make for bad science, as Lucretius well realized when he banished his gods from the universe as we know it to remote and inaccessible regions. The reasons for the failure of the modern epic of nature are more complex than this.

Part of the explanation lies in literary history, of course. In so far as the Lucretian poem is a specific case of the didactic poem in general, it was bound to share in that general decline in popularity of didactic poetry which is apparent in the later eighteenth century, as lyrical poetry of personal experience came to the forefront and prose became the main didactic medium. But the failure of the epic of nature also had a lot to do with the way in which science had developed. It is significant that most of the scientific poetry of the eighteenth century deals with natural history rather than with, for example, chemistry or physics. As the exact sciences grew more mathematical and hence more abstract, they became increasingly resistant to poetic

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56 Some modern critics, in the wake of Fritz Strich (see note 51 above), have continued to adduce this as a major reason for the failure of the scientific epic in modern times: see, for example, Aesch, pp. 250–60.
expression. Wordsworth, in the preface to his Lyrical Ballads, hoped that science might eventually become more accessible to the ordinary run of people, and said:

If the time should ever come when what is now called science, thus familiarised to men, shall be ready to put on, as it were, a form of flesh and blood, the Poet will lend his divine spirit to aid the transfiguration, and will welcome the Being thus produced, as a dear and genuine inmate of the household of man.57

This, of course, was not to be. Science has since grown more abstract still. But it is not just the abstraction of modern science that eludes Lucretian treatment. Its sheer extent and complexity are another insuperable obstacle. Admittedly, Lucretius himself had maintained that the universe is infinite (1, 958–67);58 the difference is that the known contents of his infinite universe were vastly fewer and simpler than those of the infinite universe of today. Even by 1800, scientific knowledge had developed too far for the Lucretian poem to accommodate it. In fact, such poetry had degenerated into encyclopaedism over fifty years earlier (which casts an ironic light on Schelling’s claim that science had not yet developed far enough for ‘das absolute Lehrgedicht’ to be written).

But there is more to it than that. The aim of Lucretius himself was not primarily to communicate the particulars of the scientific knowledge of his day: he uses these only to illustrate the underlying principles, or rather principle, on which this knowledge is based: namely, the principle that all things are susceptible to explanation in terms of natural causes, without the aid of religion (see Fabian (1968), p. 89). This principle is in turn the basis of his, and Epicurus’s, moral philosophy, which promises the deliverance of man from fear, and the serenity of philosophical detachment. We are to attain this end not by denying the existence of death, suffering, and evil, but by accepting them as inevitable, and by learning to live with them as best we can through control of the passions, enjoyment of pleasure, and avoidance of pain. The link between Lucretius’s view of the universe and his moral philosophy is thus a firm one. Newtonian science offered no such moral reassurance.59 There were, it is true, systems of thought in the eighteenth century which claimed to encompass both the universe of science and the whole of moral and metaphysical reality: above all, that of Leibniz, which supplied the philosophical foundation of most didactic poems in Germany up to the middle of the century. But the link between Newtonian science and Leibniz’s philosophical optimism was neither a close nor a necessary one; his optimism was based not on the progress of physics but on a priori reasoning on the nature of possible worlds. So long as the Leibniz–Wolffian system remained the popular philosophical orthodoxy in Germany, it seemed to go along quite happily with science; teleological reasoning from the wise design of creation helped to preserve the association. But, ironically, the very work which the optimists took as their model for the scientific poem, Lucretius’s De rerum natura, itself contained one of the greatest threats to their optimism in the whole of world literature. For Lucretius’s universe is the product of random movements of atoms, which are incompatible with that benevolent Providence in

58 Aesch, pp. 253–66, sees the infinity of the modern universe as the other principal reason why the neo-Lucretian epic failed. He seems unaware that Lucretius’s universe was infinite too.
59 Even in the eighteenth century, regrets were sometimes expressed that it did not encompass the moral and spiritual world (see Schatzberg, p. 271).
which the eighteenth century so much wanted to believe. As a result, much neo-
Lucretian poetry was simultaneously anti-Lucretian poetry. Its faith in science drew
it towards Lucretius, and its faith in Providence drew it away from him. This
ambivalent posture merely underlined its internal weakness and its inferiority to its
model.

It is no coincidence that the most successful didactic poem of the eighteenth
century, Pope’s Essay on Man, sticks largely to moral philosophy, says little on
science (despite its tributes to Newton), and, for all its optimism, is full of caveats on
the ability of the human intellect to comprehend the universal purpose: ‘Know then
thyself, presume not God to scan.’ Pope did not expound an integrated philosophical
system;60 his aims were more modest. He simply stated some of the tenets of popular
optimism as it was then current, and devoted most of his poem to moral questions.
His optimism was associated with, but not demonstrated from, the findings of
modern science, and by the end of the century, this association had become even
more tenuous. Science simply could not furnish the basis for a moral philosophy on
the Leibnizian pattern. Goethe took the logical step of creating a new, anti-
Newtonian science of his own in order to preserve the unity between nature as he
understood it and individual moral existence. To him and to many of his German
contemporaries, the philosophy of Spinoza, which dispensed with a transcendentinal
God, appeared increasingly attractive, supplementing, or even supplanting, the
philosophy of Leibniz.

The development of modern science thus goes a long way towards explaining why
the eighteenth century never produced a De rerum natura to rival the poem of
Lucretius. But there is a further reason why it could not have succeeded: Lucretius,
as a poet, had certain advantages over his modern successors which it was not in
their power to share. In the age of Newton, science made great discoveries. But
Lucretius made an even greater one: he discovered science itself. The teachings of
the Greek philosopher Epicurus struck the Roman poet with the force of a
revelation, and in his poem, he sets out with evangelical fervour to convert his friend
Memmius, and by extension all his readers, to the new gospel. His disadvantage as
an early Roman poet, operating with a Latin which, as he himself says in apology
(1, 136–45), was ill equipped to render the abstractions of Greek philosophical
theory, became in fact one of his strongest assets: he was compelled to become a
linguistic innovator, to deploy in new ways all the resources of archaism, colloquial-
ism, and the down-to-earth concrete vocabulary he had at his disposal, and they lent
his verse a vitality and exuberance which an established philosophical terminology
could never have achieved.61 The force of his poetry, what Statius called the docti
furo arduus Lucreti,62 was the force of triumphant assurance. As Herder shrewdly
observed, ‘Nie wird ein Lehrdichter feuriger und stärker schreiben, als Lucrez
schrieb; denn er glaubte seine Lehre’ (SW, xiv, 194). Bertolt Brecht, in his
remarkable unfinished attempt to render the doctrines of the Communist Manifesto in
hexameters, shared at least one quality with Lucretius which few of his other

60 As Lessing and Moses Mendelssohn rightly pointed out in their Pope ein Metaphysiker! (see note 30
above); see also Fabian (1976), p. 556, and Peter Michelsen, ‘Ist alles gut? Pope, Mendelssohn und
Lessing (Zur Schrift Pope ein Metaphysiker!),’ in Mendelssohn-Studien, edited by Cécile Lowenthal-Hensel
61 See Alexander Dalzell’s chapter on Lucretius in The Cambridge History of Classical Literature, Vol. II,
62 P. Papinianus Statius, Silvae, ii, 7, line 76.
imitators possessed: namely, his tone of impassioned conviction. That was precisely what Polignac, Wieland, and the eighteenth-century anti-Lucretians lacked. They were dealing in the already well-worn currency of Cartesian and Leibnizian metaphysics, and they were fighting a rearguard action on behalf of a declining faith. In fact, they were themselves already half seduced by the scientific gospel of their Roman predecessor, whose naturalistic tendency was ultimately more in keeping with the spirit of their age than were their own half-hearted compromises between science and religion. By the beginning of the nineteenth century, those who talked of a future epic of the universe had no new wisdom with which to replace the faith they had lost — hence their constant references to an indeterminate future, and to a new mythology yet to come. The Spinozism which some of them espoused was admittedly more consistent with modern science than Leibniz’s metaphysical theories had been — not in its legacy of pantheism (which was already archaic), but in its affirmation of the universal rule of natural law. But this could no longer be presented as a new gospel. Europe already took it for granted.

Although the new Lucretius never made his appearance, the whole episode had at least two positive results: the poems on nature and science by Goethe, who wisely settled for less than the original over-ambitious plan; and the splendid hexameter translation of the De rerum natura by Karl Ludwig von Knebel, who abandoned his own project of a neo-Lucretian poem in order to restore the original to his German contemporaries.

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64 On Knebel's early project and his reasons for abandoning it, see his letter to Goethe of 2 February 1825, in Briefwechsel zwischen Goethe und Knebel, ii, 362.