Lucretius and nature's monsters

Of the six books of Lucretius' *De rerum natura* Book V has generated the least disagreement among the commentators, for the reason that Book V itself is narrative rather than argumentative. Not that Lucretius has abandoned his role as an expositor of Epicurean teaching. Rather it is now no longer a case of explaining, illustrating, and defending the technical details of Epicurean doctrine, but a case of applying to a more general theme certain Epicurean principles which have for the most part already been established. I am loathe to disturb the ground which the scholarly tradition has left reasonably well alone, but there is a point on which the commentators have done Lucretius an injustice and he deserves to have the record set straight. The point is not unimportant in itself. Moreover, a correct interpretation illustrates a cardinal principle of Epicurean scientific method.

Book V divides itself neatly into three parts. At the beginning we have some seven hundred lines describing the formation of the world and the nature and movement of the heavenly bodies; at the centre we have some one hundred and fifty lines dealing with the emergence of plant, animal, and human life; and to close we have some five hundred lines reviewing the development of human society. Our concern is with the short middle section (5. 772-994).

Now it is important to recognise that when Lucretius comes to describe the primal condition of the earth and the emergence of plant, animal, and human life, he does what he does on several occasions throughout the poem when he is faced with the problem of treating things which for one reason or another lie beyond the limits of human experience: he argues by analogy. We are familiar, for example, with his comparision of invisible atomic particles with motes dancing in a sunbeam (2.114-120). The analogy which he

employs in the present context is one that is familiar to the reader in that it is an extension of the one he has been employing already in his examination of the formation, growth and eventual collapse of the world as a whole. It is an analogy with the process of growth and decans in the human bodies: during the course of its life a body continually takes in and gives off atoms; while it is growing the number of atoms it takes in exceeds the number of atoms it gives off; as it reaches maturity the amounts are equally balanced; the body begins to decline when because of its bulk it commences to give off more atoms than it takes in; finally, as the body is less and less able to supply all its parts so it is weakened throughout and unable to withstand blows from without and dissolution follows (2. 1122-43; cf. 5. 235-415).

The world itself experiences a parallel process of growth, decline, and dissolution. From the outset it takes in a steady supply of atoms until it achieves the limit of its growing period, at which point it begins to lose more particles than it absorbs and the process of dissolution and collapse is set in train (2. 1105-1117; 2. 1139-1145).

So, when Lucretius comes to examine the first stages of the earth's development it is this same analogy with living things that he employs, describing how nature first provided the earth with a protective covering of grass and flowers just as new-born animals and birds are provided with fur and feathers. Then the earth of herself brought forth living creatures - first birds and then animals of various kinds, including humans, all issuing forth from wombs which clung to the earth by their roots. Further, the earth as mother furnished nourishment and covering for her offspring - sap form her pores and soft grass (5. 783-820).

Lucretius has described the earth in its tender infant years, needing and receiving protection, and the earth attaining maturity and giving birth to the first creatures. Given the analogy which Lucretius is employing what follows is wholly expected:

sed quia finem aliquam pariendi debet habere, destitit, ut mulier spatio defessa vetusto.
mutat enim mundi naturam totius aetas
ex alioque alius status excipere omnia debet,
nec manet ulla sui similis res: omnia migrant,
omnia commutat natura et vertere cogit.
namque aliud putrescit et aevo debile languet,
porro aliud succrescit et < e > contemptibus exit.
sic igitur mundi naturam totius aetas
mutat et ex alio terram status excipit alter,
quod tulit ut nequeat, possit quod non tulit ante.

— «But because there must be an end to giving birth, the earth ceased to bear, *like a woman tired out by age*. For age changes the nature of the whole world and in every sphere one stage must follow another and nothing remain always the same: all things change, all things without exception nature forces to take a different path. For one thing rots and decays as it is weakened by time, while another grows in its place. Thus does age alter the nature of the whole world as the earth moves from one condition to the next, incapable now of bearing what once it could but bearing instead what before it did not» (5. 826-836).

The natural cycle is complete. Infancy, maturity, old age. So far, so good. But it is here that a difficulty arises. At this point there occurs the familiar and for our purposes crucial passage:

multa tum tellus etiam portenta creare conatast mira facie membris coorta, androgynum, interutrasque nec utrum, utrimque remotum, orba pedum partim, manuum viduata vicissim, muta sine ore etiam, sine vultu caeca reperta, vinctaque membrorum per totum corpus adhaesu, nec facere ut possent quicquam nec cedere quoquam nec vitare malum nec sumere quod foret usus. cetera de genere hoc monstra ac portenta creabat, nequiquam, quoniam natura absterruit auctum...

— «At this point earth struggled to bring forth a crowd of freakish creatures, monstrous to behold, grotesque in build - androgynous forms, part one sex and part the other and yet distinct from either one, creatures lacking feet, others with hands missing, some without the power of speech, others bereft of eyes to see, still others paralysed, their limbs stuck fast to their bodies at every point so that they were prevented from doing anything at all or moving the slightest bit or avoiding harm or grasping anything that might be of use. Still more such montrous freaks did the earth bring forth, but to no account since nature vetoed their increase...» (5. 837-846).

I suggested that this passage is familiar, and what makes it particularly so is its similarity to a passage in Empedocles: «Many creatures were born with faces and breasts on both the front and the back of their bodies, oxen with human heads, men with the heads of cattle, as well as indeterminate forms, part male and part female, endowed with parts that were neither one thing nor another» (fragment 61, DK). The similarity has been duly noted by all

the commentators. However, the commentators have not simply noted the similarity, they have imposed upon the Lucretian passage the same intent which is present in Empedocles, and this is the injustice we referred to at the outset. For what Empedocles describes, in vaguely Darwinian terms, is an *experimental* stage in the creation of living forms in which all manner of unsuitable formations were attempted, formations which failed to survive and which were gradually replaced by perfect specimens. And it is precisely this interpretation which the commetators have given to the Lucretian passage. Cyril Bailey may speak for them all:

«[this passage] contains Lucretius' view of the «origin of species». In the early days, when living creatures were still being created from the earth, nature made all sorts of experiments before she succeeded in producing creatures which could survive... The affinity of Lucretius' theory to modern docrines of evolution has often been noticed and [this passage] greeted as a noticeable anticipation of Darwin's theory»¹.

One would like to be able to agree with Lucretius' best English commentator, but the facts cry against it. For if we pursue Lucretius' analogy as Lucretius expects us to it is clear that the stage which he is describing is one that comes not in the early stages but at the end. Lucretius has already described the creation of perfect human and animal forms, produced by the earth when she was at the height of her generative power. Now she has passed the natural age for giving birth, 'like a women worn out with age', as Lucretius clearly states. And just as women run a high risk of giving birth to deformed children once they have reached a certain age (a fact of which Lucretius was undoubtedly aware), so the earth suffers the same experience. What Lucretius anticipates, in short, is not Darwinian theory but mongolism or Down's Syndrome.

I suggested at the outset that a correct interpretation of the Lucretian passage in question illustrates a cardinal principle of Epicurean scientific method. Let me conclude by elaborating. The entire thrust of the *De rerum natura* is to enable the reader to attain that contentment of mind which comes from the realisation that there is nothing in nature which is not governed by entirely natural processes, whether it be the constitution and behaviour of matter,

¹ C. Bailey, Titi Lucreti Cari De Rerum Natura, 3 vol. Oxford 1947, 3, 1461.

the cessation of consciousness at the moment of death, the occurence of eclipses, or the origin of language. The most difficult problem facing the Epicurean scientist has to do not with things which are immediately visible to the senses, even though these are frequently misunderstood, but with those things which lie beyond the range of human perception. We have already alluded to that atomic world which is inaccessible to us and which we are forced to approach analogically, working from effect to cause, from the realm of the known and visible to the realm of the unknown and hidden. So also with respect to things which we are prevented from seeing because they are too far removed from our experience through the passage of time. Thus in the passage which we have been considering on the infancy of the world, Lucretius employs the comparison of the earth with a mother not just as a metaphor or picturesque image. For Lucretius it is a scientifically valid method of discovery which enables us to employ the evidence of our experience to uncover truth about a hidden world. We may not be prepared to follow Lucretius in his conclusions, but it is important that we recognise the value which he himself assigns to his procedure.

HOWARD JONES