LUCRETIUS, LIGHTNING, AND LIPARI

In *De rerum natura* 6, Lucretius suggests four causes for the production of lightning. The second (172–203) is for lightning to be generated by winds in thick, high-piled clouds. These clouds appear in the semblance of mountains:

contemplator enim, cum montibus assimulata nubila portabunt venti transversa per auras, aut ubi per magnos montis cumulata videbis insuper esse aliis alia atque urgere superne in statione locata sepultis undique ventis. tum poteris magnas moles cognoscere eorum speluncasque velut saxis pendentibu' structas cernere, quas venti cum tempestate coorta complerunt, magno indignantur murmure clausi nubibus in caveisque ferarum more minantur; nunc hinc nunc illinc fremitus per nubila mittunt quaerentesque viam circum versantur et ignis semina convolvunt (e) nubibus atque ita cogunt multa rotantque cavis flammam fornacibus intus, donec divulsa fulserunt nube corusci.

[6. 189–203]

Within this picture of clouds as mountains there are two essential further images. The winds in the "caves" are compared to beasts in cages (197–200), and the caves themselves become hollow furnaces (202). The furnaces in turn suggest that the "mountains" visualized by Lucretius are volcanic (cf. the vastae Aetnae fornaces in 6, 681).

But even with this adjustment to the underlying mountain image, the abrupt change from caged animals to furnaces remains harsh. A comparison with two Virgilian passages, however, can help us follow Lucretius' train of associations.

In the first book of the *Aeneid*, when Juno visits Aeolia, where king Aeolus keeps the winds imprisoned in a cave, Virgil imitates Lucretius' image of the caged heasts.³

... hic vasto rex Aeolus antro luctantis ventos tempestatesque sonoras imperio premit ac vinclis et carcere frenat. illi indignantes magno cum murmure montis circum claustra fremunt . . .

[Aen. 1. 52-56]

1. David West points out the full extent of the image in The Imagery and Poetry of Lucretius (Edinburgh, 1969), p. 54.

2. For this image, compare 6. 278 where an eddy of wind within a cloud sharpens the thunderbolt (fulmen) in the hot furnaces (calidis . . . fornacibus). Technically, the ancients distinguished between the thunderbolt, which reaches the earth, and the lightning flash, which does not.

3. Bailey quotes 55-56 in support of the meaning "chale" for *indignantur* in our Lucretian passage, but it is not clear that he sees the extensive similarity of thought and language and realizes that Virgil is imitating Lucretius. (Wakefield and Munro had been aware of the imitation.) No editor, to my knowledge, uses the Virgilian passage to interpret the original.

It may be doubted that the application of the image to Aeolus' realm was an original contribution of Virgil rather than an implicit element in the Lucretian passage (see below). Virgil also has something to offer on volcanoes and furnaces. In *Aeneid* 8 Vulcan proceeds to his smithy on the island of Volcania, where he will interrupt the works in progress in order to forge divine armor for Aeneas. First, the island is described:

insula Sicanium iuxta latus Aeoliamque erigitur Liparen fumantibus ardua saxis, quam subter specus et Cyclopum exesa caminis antra Aetnaea tonant, validique incudibus ictus auditi referunt gemitus, striduntque cavernis stricturae Chalybum et fornacibus ignis anhelat, Volcani domus et Volcania nomine tellus.

[Aen. 8.416-22]

Among the projects to be left in abeyance, fulmen erat (427); and fulgores . . . miscebant operi (431-32).

In the whole passage, then (Aen 8. 407-453, which does not imitate Lucretius), there are brought together furnaces, the fulmen of Jupiter, and fulgores⁴ or lightning flashes. The setting is volcanic, of course, for Vulcan's island is one of the volcanic Lipari Islands off the northeastern coast of Sicily. But for the ancients the seven Lipari Islands were Aeoliae insulae, the home of Aeolus.⁵ Virgil explicitly makes the identification in 8. 416-17 and alludes to it again in 454: "haec pater Aeoliis properat dum Lemnius oris . . ." It is also interesting (in view of the similar vocabulary for lightning and Aetna in Lucretius) that the shared volcanic phenomena were apparently enough to encourage a conflation of the Aeoliae insulae with Mt. Aetna (antra Aetnaea 419; cf. Aetnaei Cyclopes 440).

Comparison of Aeneid 1. 52-56 and 8. 416 ff. thus shows clearly that, for Virgil, Aeolus, Vulcan, the volcanic Aeoliae insulae, the bolt of Jupiter, and even Mt. Aetna were closely associated. This clear association, both thematic and geographic, of Aeolus' caves and Vulcan's lightning-forge permits us to draw several conclusions of some interest for the "poetics" of both Virgil and Lucretius. (1) When Virgil borrowed his "caged animals" image from Lucretius 6. 189 ff., he clearly interpreted that passage within the framework of the Aeolus myth. (2) With this as a starting point, it is surely not extravagant to propose a new interpretation of the original: Virgil read the passage precisely as Lucretius intended it to be read. Lucretius too was thinking of Aeolus. (3) In perfect harmony with this would be the Aeolus-Vulcan association which Virgil made explicit. Almost certainly it underlies our Lucretian passage, where it would continue the mythic-epic train of thought. More specifically and importantly, it would remove the seeming incongruity of "furnaces" and "caged animals."

- 4. Again, the distinction between lightning flash and thunderbolt. See n. 2.
- 5. OCD, s.v. Aeoliae insulae. In OCD¹ ancient passages (to which add Aen. 8. 416-17) are cited and the association with Vulcan is stressed. (Cf. also H. J. Rose, Handbook of Greek Mythology ⁶ [London, 1958], p. 165, for the cult of Hephaestus in the Lipari Islands and Sicily.)
- 6. Vulcan (or a Cyclops) may also be in the background at 6. 278 (which I have cited for its "furnaces") when the wind "sharpens" (acuit) the thunderbolt. As for the compatibility of caged animals and furnaces, it may not be coincidental that in the Aetna passage (6. 680 ff.) the flame is

In sum, when Lucretius introduces into his scientific account of lightning images of winds in caves, caged beasts, and hollow furnaces, he has been directly inspired by the old epic accounts of Aeolus, the king of the winds, and of Vulcan, the divine creator of lightning and the thunderbolt.⁷ But he consciously departs from epic technique by using images drawn from myth to illustrate nature, rather than the reverse.⁸

There is an exact parallel, both to Lucretius' use of images taken from a myth, without explicit reference to that myth, and to Virgil's correct reading of the Lucretian passage. It is Virgil's own use of a hunting motif, borrowed, without explicit reference, from the tale of Phaedra and Hippolytus, and Seneca's obvious grasp of the Virgilian allusion. In *Ecloque* 10, Gallus, pining for his distant love, proposes to dwell in the Arcadian mountains, among the nymphs, and hunt wild boars (acris venabor apros, 56). Bruno Snell's remarks⁹ about the proposed hunt are most instructive and to the point:

Actually, Virgil is following in the footsteps of an ancient tradition. Euripides had shown in his *Hippolytus* how Phaedra fell in love with her stepson. He is a huntsman, and so he is not interested in love. Phaedra, in her feverish dreams, imagines herself setting out for the mountains to hunt (215 ff.); only thus, she feels, will she be able to join the object of her passion: a desire which she cannot, of course, confess openly before the chorus. Virgil's transfer of this motif to the Arcadian sorrows of Gallus seems to have been understood at once by the educated Romans. For Seneca, in turn, employs certain elements from this speech of Gallus for the purpose of describing the hunt of Hippolytus in his tragedy *Phaedra* (1–48).

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irritata, a word used elsewhere of Molossian hounds (5. 1063) and lionesses in warfare (5. 1318), while the wind "strikes out" fire (*ubi . . . excussit . . . ignem*). At the very least, the latter phrase suggests the divine smith once again.

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διά καὶ

ἔνιοι οὐκ είδότες ἐτέρων εἰδότων πρακτικώτεροι, καὶ ἐν τοῖς ἄλλοις οἱ ἔμπειροι· εἰ γὰρ εἰδείη ὅτι τὰ κοῦφα εὕπεπτα κρέα καὶ ὑγιεινά, ποῖα δὲ κοῦφα ἀγνοοῖ, οὐ ποιήσει ὑγίειαν, ἀλλ' ὁ εἰδώς ὅτι τὰ ὁρνίθεια κοῦφα καὶ ὑγιεινὰ ποιήσει μᾶλλον [Bekker].

^{7.} In the *ironic* passage on Jupiter and the thunderbolt (6. 379 ff.), mythic and epic associations (regarding a phenomenon intimately linked with lightning) rise to the surface, but in the earlier passage overt references to Aeolus and Vulcan would work against Lucretius' scientific intent. The "mythologizing" of natural phenomena, however, is comparable to Lucretius' personifying of the atoms, and can be explained on aesthetic principles.

^{8.} This interesting "reversal" was pointed out to me by R. Renehan, as was the Snell reference (n. 9).

^{9.} The Discovery of the Mind², trans. T. G. Rosenmeyer (1953; repr. ed. New York: Harper Torchbooks, 1960), p. 298. See also Snell's discussion of the topos linking unhappy love and hunting in Scenes from Greek Drama (Berkeley, 1964), esp. p. 37.