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.

EN 6. 1141b20

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.

The most recent English translator has rendered this:

And it is in view of this that some men, without universal knowledge but with experience in other things, are more practical than those who have universal knowledge only; for if a man knew universally that light meats are digestible and healthy but did not know what kinds of meats are light, he would not produce health, but a man who knows that chicken is light and healthy is more likely to produce health.¹

EN 6. 1141b20 has puzzled commentators since Adolf Trendelenburg, followed by the majority of modern commentators, first bracketed κοῦφα καί. The difficulty with Bekker's original reading (he later adopted the proposed exclusion) can be readily shown. Aristotle is here contrasting practical experience with a merely theoretical understanding that cannot realize a desirable end in a practical context. He claims that the ξμπειρος is closer to exhibiting φρόνησις than his learned counterpart because he is acquainted with particulars (γνωρίζειν τὰ καθ' ἔκαστα), the proper domain of πρᾶξις (6. 1141b14-16). Aristotle's example is dietetic,3 where the end is health, and depends (for moderns) on a peculiar theory of nutrition. The view is that light and porous meats (τὰ κοῦφα κρέα), being relatively dry, are more nourishing than heavier, wetter foodstuffs. The Hippocratic explanation maintained that "nutritive food is supposed to be dissolved in moisture, and thus to be carried to every part of the body, assimilating itself to bone, flesh, and so on, as it comes into contact with them." In the present passage, Aristotle notes that one who knew that light, digestible meat was eo ipso conducive to health, and yet did not know which sorts of meat were light, would not be likely to produce health. The received text (reading κοῦφα καί) supplies the ξμπειρος with the missing bit of information; he knows that the flesh of fowls is light and hence healthy. But, of what, then, is the more practical man supposed to be ignorant, as he is characterized initially?

Trendelenburg writes, "Wer indessen weiss, $\delta \tau \iota \tau \dot{\alpha} \delta \rho \nu i \theta \epsilon \iota \alpha \kappa o i \phi \alpha \kappa \alpha i \dot{\nu} \gamma \iota \epsilon \iota \nu \dot{\alpha}$, dass das Vogelfleisch leicht und gesund sei, weiss beides, das Allgemeine und Besondere. In dem Begriff $\kappa o i \phi \alpha$ hat er bereits den allgemeinen Grund, den terminus medius des ganzen Schlusses. Der $\dot{\epsilon} \mu \pi \epsilon \iota \rho o s$, an das Einzelne gebunden, ist noch ohne die Bestimmung des Allgemeinen. Daher weiss er in dem vorliegenden Falle auch nur, dass das Vogelfleisch gesund ist; ob es leicht ist, ob es darum gesund sei, weil es leicht ist, geht ihn noch nicht an." As he points out, the MSS credit the man of experience with knowing the crucial connection between food's being light and its

^{1.} H. G. Apostle (trans.), Aristotle: "The Nicomachean Ethics" (Dordrecht, 1975), p. 108.

^{2.} Historische Beiträge zur Philosophie, vol. 2 (Berlin, 1855), pp. 371-73.

^{3.} For a useful discussion of Aristotle's employment of dietetic and medical examples see W. Jaeger, "Aristotle's Use of Medicine as Model of Method in His *Ethics*," *JHS* 77 (1957): 54-61 (= *Scripta Minora* [Rome, 1960], 2:491-509).

^{4.} Περὶ διαίτης 2. 46-47 grades beef and poultry with respect to dryness, noting that "nearly all birds are drier than beasts" and hence more nourishing for males who thrive on a regimen of dry and warm foods (27): W. H. S. Jones (ed.), Hippocrates, Loeb Classical Library (London, 1923-31), 4:316-21, 264-65. An echo of this tradition can be heard in Aristotle's remark at 7. 1147a5-6: παντὶ ἀνθρώπω συμφέρει τὰ ξηρά.

^{5.} Jones, Hippocrates, 1:337-38 (introduction to $\Pi \epsilon \rho i \tau \rho o \phi \hat{\eta} s$).

^{6.} Beiträge, p. 373.

being thereby healthful. Wishing to obtain the sharpest possible contrast between the two, however, Trendelenburg proposed simply to strike $\kappa o \hat{v} \phi \alpha \kappa \alpha l$, leaving the $\tilde{\epsilon}_{\mu\pi\epsilon\iota\rho\sigma}$ experientially aware of chicken's place in a healthy diet. For, if the $\tilde{\epsilon}_{\mu\pi\epsilon\iota\rho\sigma}$ knew this simply from experience, he would still be in a better position to choose what would produce health than would be the impractical dietitian.

The proposed deletion of κοῦφα καί is defensible on textual grounds. Puzzled by the word order in 1141b18–19, and wishing to insert a καί between κοῦφα and εὅπεπτα, a copyist may have introduced the marginal variant κοῦφα καί. This, in turn, could have been misplaced in 20 by a later scribe who expected a κοῦφα in all three clauses: (1) ὅτι τὰ κοῦφα . . . (2) ποῖα δὲ κοῦφα . . . (3) ὅτι τὰ ὁρνίθεια κοῦφα . . . A similar process has been invoked for other passages in the Ethics and may justify Trendelenburg's deletion. Robert Renehan offers 1. 1094b14–18 as "a good illustration of this type of error in Aristotle" and quotes a letter Werner Jaeger had written to him: "The words in Κ τολλήν ἔχει διαφορὰν καὶ πλάνην ὅστε are clearly a varia lectio for . . . τοσαύτην ἔχει διαφορὰν καὶ πλάνην ὅστε which was written in the margin of an older copy as alternative reading, but got into the text in [17] after τοιαύτην τινὰ. Var. lectiones in the E.N. ought to be investigated." Trendelenburg's striking of κοῦφα καί, then, has solid support and has understandably found favor with later commentators.

His proposal, however, while convincing to so many, is stoutly resisted by John Burnet in his defense of the original reading. Burnet notes that the man of experience is still ignorant of the connection between lightness and digestibility (as in the Hippocratic explanation): "What the ξμπειρος does not know is the middle term [i.e., εὔπεπτα] connecting κοῦφα and ὑγιεινά. He knows that light meat is healthy but not why." This attractive suggestion, however, requires us to take the words ότι τὰ κοῦφα εὕπεπτα κρέα καὶ ὑγιεινά at 18-20 as "that light meat is digestible, and, since digestible meat is wholesome, therefore light meat is wholesome." Surely, L. H. G. Greenwood is correct in rejecting such a translation.¹⁰ Unfortunately, Greenwood goes on to oversimplify the text by proposing "to take εὔπεπτα and ὑγιεινά as synonyms, so that εὕπεπτα καὶ might even be omitted without destroying the reasoning."11 This, of course, presupposes an explicative kal here, a reading also favored by R. A. Gauthier and J. Y. Jolif. 12 The position of κρέα, however, separating εὔπεπτα and καί, threatens to spoil this move. It would be better to take καί adverbially, as throwing emphasis upon ὑγιεινά, both here at 18 and in the parallel line at 20. The effect in both lines is to emphasize that meats of a certain sort (light and digestible or fowl) are also (actually) healthy.¹³

The full syllogism of the present passage, then, would be as follows:

- P1 Light, digestible meats are actually healthy.
- P2 The flesh of fowls is light (hence, digestible).

C1 The flesh of fowls is actually healthy.

- 7. R. Renehan, "Nugae Xenophonteae," RhM 114 (1971): 138.
- 8. J. Burnet, The "Ethics" of Aristotle (London, 1900), p. 270.
- 9. See Met. 1. 981a28-30: οἱ μὲν γὰρ ἔμπειροι τὸ ὅτι μὲν ἴσασι, διότι δ' οὐκ ἴσασιν.
- 10. Aristotle: "Nichomachean Ethics," Book Six (Cambridge, 1909), p. 190.
- 11. Ibid.
- 12. "L'Ethique à Nicomaque" (Louvain, 1970), 2.2:496-97. The various proposed solutions (with a list of their adherents since Trendelenburg) are handily summarized here also.
- 13. J. D. Denniston notes that $\kappa a l$ in the sense of "also" (addition) or "even" (climax) easily passes into "actually" in such emphatic contexts (*Greek Particles* [Oxford, 1934], pp. 316–17).

We are told that the dietitian knows only P^1 and thus fails to reach C^1 . The man of experience knows C^1 but not that it follows from P^1 and P^2 . If we seek the sharpest possible contrast between him and the dietitian, we may also suppose that he is totally ignorant of P^1 and P^2 . But, "since the last proposition is both an opinion about a perceptible object and an authority with respect to actions" (7. 1147b9–10), knowledge of C^1 is sufficient to produce health.

For another example, imagine a tribe of South Americans that chews certain indigenous roots and, as a result, enjoys a low incidence of arterial sclerosis. Laboratory experiment has synthesized the chemical these roots naturally contain and has shown it to be helpful in clearing arteries. Thus far, however, no one has been able to introduce it successfully into civilized diets; the taste is always spoiled. The relevant syllogism would run:

P³ Chemical X, an arterial cleanser, is actually healthy.

P4 Root Y contains chemical X.

C2 Root Y is actually healthy.

Now the native, knowing neither P³ nor P⁴, and certainly ignorant of their jointly implying C², is nevertheless in a better position to ensure healthy arteries than his more knowledgeable counterpart in the medical laboratory.

Taking Aristotle's example as analogous to this contemporary one, we get a clear and convincing illustration of his main point at 6. 1141b16-18: "This is why some who do not know, and especially those who have experience, are more practical than others who know" (W. D. Ross's translation). It is similar to the point fully discussed at *Met*. 1. 981a12-b13. There we are told that a doctor who has "theory without experience" (a21) and is "acquainted with the universal but ignorant of the particular contained therein will frequently fail in treatment" (a22-23). In both passages the lesson is the same—theory must often give way to experience in the realm of action.

If the point of our passage has now been clarified, we have yet to solve the textual problem created by the appearance of κοῦφα καί at 20. Agreeing with Trendelenburg that some change was required, Hermann Rassow counseled against simply striking the phrase: "Allein man sieht nicht, was zu einem derartigen Zusatz irgend Veranlassung geben konnte, und es liegt jedenfalls näher, an einen Schreibfehler zu denken."14 If we suppose but a simple error in transcribing an original text reading κρέα (though written none too clearly), it is likely that κοῦφα at 18 was wrongly repeated at 20. As Herbert Richards says, "This kind of mistake, by which a word that occurs in the context or is suggested by it gets substituted for the word really intended, is known and to a certain extent generally recognized, but it deserves more attention than it has received."15 This type of mistake, Richards observes elsewhere,16 is facilitated by any orthographic resemblance between the two words: "Words of the same general character, the same length, same number of syllables, same beginning or ending, lend themselves especially to it." KPEA and KOTPA surely meet most, if not all, of these tests. Rassow's emendation. then, is a perfectly natural solution on a number of grounds.

^{14.} H. Rassow, Forschungen über die "Nikomachische Ethik" (Weimar, 1874), pp. 96-97.

^{15.} H. Richards, Aristotelica (London, 1915), p. 74. He finds examples of this common error at 6. 1142b7 and 5. 1135b2 (p. 20).

^{16.} Notes on Xenophon and Others (London, 1907), p. 308.

Only Greenwood has attempted to counter Rassow's suggestion, finding it "unlikely, if for no other reason, because of the $\kappa a i$, which would spoil the sense by throwing emphasis on $\delta \gamma \iota \epsilon \iota \nu \dot{\alpha}$ instead of on $\delta \rho \nu \iota \dot{\theta} \epsilon \iota \alpha$." Structurally, however, this is what we should expect unless the emphasis is similarly misplaced at 18–19. We have already examined Greenwood's attempt to suppress $\epsilon \dot{\nu} \pi \epsilon \pi \tau \alpha \kappa \alpha i$ there, and we should note that he has no objection to $\kappa \rho \dot{\epsilon} \alpha$ as originally appearing without the $\kappa \alpha i$ here at 20. In both instances, however, he overlooks the adverbial reading of $\kappa \alpha i$ defended above. There is, furthermore, no difficulty with $\delta \rho \nu i \dot{\theta} \epsilon \iota \alpha$ modifying $\kappa \rho \dot{\epsilon} \alpha$. This proposal, i.e., to read $\kappa \rho \dot{\epsilon} \alpha \kappa \alpha \dot{\epsilon}$ in 20, supports Trendelenburg's diagnosis of the difficulty, which has rightly found wide support, but avoids his own radical surgery. Rassow's conjecture remains, a century later, the best proposal to date.

Finally, it may be wondered whether the ancient Greek commentators would be of any additional help. Unfortunately, Aspasius' commentary, which would no doubt have been useful, is not extant for Book 6.19 Now, it is true that both Heliodorus²⁰ and Eustratius²¹ read $\kappa o \hat{\nu} \phi a \kappa a l$, not $\kappa \rho \epsilon a \kappa a l$. Since they date, however, from the fourteenth and early twelfth centuries respectively,²² there had already been ample opportunity for the postulated slip. There remains one potentially useful witness, viz., the Latin translation employed by Aquinas (usually known as Γ and attributed to William of Moerbeke), which renders 6. 1141b16–20 as follows:

Propter quod et quidam non scientes quibusdam scientibus magis, et in aliis experti. Si enim sciat, quoniam leves bene digestibiles carnes et sanae, quales autem leves ignorat, non faciet sanitatem. Sed sciens quoniam, quae volatilium et sanae, faciet magis.²³

Since Γ here fails to repeat leves from $18,^{24}$ we have at least some evidence that $\kappa o \hat{\nu} \phi a$ was missing in the Greek original. Unfortunately, since the translator also omits carnes from 20, Rassow's reading $\kappa \rho \epsilon a$ is not fully supported, either. Indeed, one might propose a modified version of Trendelenburg's position, deleting only the $\kappa o \hat{\nu} \phi a$ and not the $\kappa a \epsilon$. For, if the translator had a MS before him with $\tau a \delta \rho \nu i \theta \epsilon \iota a$ $\kappa \rho \epsilon a$ he would most probably have written carnes volatilium, not the un-Latin, i.e., Greek, quae volatilium (= $\tau a \delta \rho \nu i \theta \epsilon \iota a$).

The key to resolving this difficulty lies in a full appreciation of the resources available to a Latin translator of the Greek materials. As M. L. West has noted in his discussion of a sixth-century translation of the Hippocratic *De hebdomadibus*, the use of *quae* "is the translator's way of dealing with the Greek article" (e.g., "quae minima et quae magna" = $\tau \dot{a} \tau \epsilon \mu \iota \kappa \rho \dot{b} \tau a \tau a \iota a \iota \tau \dot{a} \mu \epsilon \gamma \dot{a} \lambda a$. ²⁵ Γ makes frequent

- 17. Greenwood, "Nicomachean Ethics," Book Six, p. 190.
- 18. LSJ⁹ cites four such occurrences, including EN 6. 1141b20.
- 19. "Mais nous avons conservé le commentaire d'Aspasius sur les livres I à IV, sur une partie du livre VII et sur le livre VIII..." (Gauthier, "L'Éthique à Nicomaque," 1.1:100).
- 20. In "Ethica Nicomachea" Paraphrasis, ed. G. Heylbut, Commentaria in Aristotelem Graeca, vol. 19 (Berlin, 1889), p. 122. 41-42.
- 21. In "Ethica Nicomachea" Commentaria, ed. G. Heylbut, Commentaria in Aristotelem Graeca, vol. 20 (Berlin, 1892), p. 335. 4 and 22.
- 22. Gauthier, "L'Éthique à Nicomaque," 1.1:106, 104.
- 23. Sancti Thomae Aquinatis Opera omnia, ed. G. M. Allodi (Parma, 1852-73; repr. New York, 1948-50), 21:206.
- 24. Unfortunately the English translator of Aquinas obscures this fact by inserting "light and" at 20 (C. I. Litzinger, O.P. [trans.], Aquinas: Commentary on the "Nicomachean Ethics" [Chicago, 1964], 2:569).
 - 25. "The Cosmology of Hippocrates, De hebdomadibus," CQ 21 (1971): 378.

use of this device, notably at 5. 1131a21-22, 1133b1-2, 1134b35; 6. 1141a17; 7. 1152b23-24, et passim. Now, if there had been available a suitable Latin adjective to render the Greek ὀρνίθεια, the translator might have been able to reproduce the original while preserving the Greek word order as well. And, as I. Bywater has noted, this translation "follows the Greek so closely that Γ is practically almost as good as a Greek MS. to us."26 But volatilis is too general in meaning ("flying," "winged"), while the substantive volatile, which can mean "a fowl" in late Latin, lacks a corresponding adjectival form. Hence, not wishing to spoil the original word order nor to write volatilium carnes, the translator settled on a form of expression leaving carnes understood. He may also have expected the reader to interpolate the missing word naturally from 18 above. It must be admitted that such omissions in Γ are rare. In examining Books 5, 6, and 7 of the *Ethics*, I have discovered only one instance, at 7. 1152b23-24, where the original σχεδόν is apparently dropped. A sufficiently precise parallel to the explanation offered here is not available in these three books. Nevertheless, a case can be made that Γ offers some support for Rassow's reading, and we may reasonably hope that this is one of those few instances where Bywater's confidence in Γ 's ability to take us "behind the readings of both K^b and L^b" is vindicated.²⁷ If the above account is defensible, we have yet another reason for preferring Rassow's reading at EN 1141b20. While we have not proved its correctness (the deletion commonly accepted has some merit), the neglect of his conjecture is not justified.

Finally, Rassow's reading helps to preserve a distinction between the man of experience and the man of art $(\tau \epsilon_{\chi \nu \eta})$ that Aristotle draws in the first chapter of the *Metaphysics*:

Now art arises when from many notions gained by experience one universal judgment about a class of objects is produced. For to have a judgment that when Callias was ill of this disease this did him good, and similarly in the case of Socrates and in many individual cases, is a matter of experience; but to judge that it has done good to all persons of a certain constitution, marked off in one class, when they were ill of this disease, e.g. to phlegmatic or bilious people when burning with fever—this is a matter of art [Ross's translation of *Met.* 1. 981a5–12].

^{26.} Contributions to the Textual Criticism of Aristotle's "Nicomachean Ethics" (Oxford, 1892), p. 10. 27. Ibid., p. 11.

ποιητική.''²⁸ And, although the latter is clearly Aristotle's favored sense (cf. 6. 1140a20), both share the important phrase $\mu\epsilon\tau$ à λόγου, a qualification that would not apply to the merely experienced. For the $\xi\mu\pi\epsilon\iota\rho$ os could not be relied upon to provide a λόγοs (whether true or false) of his practice of including chicken in his diet. This is what the man of $\tau\epsilon\chi\nu\eta$ can provide. But, wishing to heighten the contrast between the inexperienced theorist and the practically oriented $\phi\rho\delta\nu\iota\mu$ os, Aristotle chooses as his example, not the man of art, but the man of raw experience alone. Rassow's conjecture has the distinct advantage over both the MS tradition and Trendelenburg's proposed deletion of preserving that original Aristotelian emphasis.²⁹

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28. Greenwood, "Nicomachean Ethics," Book Six, p. 183.

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ANTHOLOGIA LATINA 719E (RIESE) IN REG. LAT. 1661

Anthologia Latina 719e is a poem of 78 verses dealing with medicine and sometimes attributed to a certain Marcellus Empiricus. The edition of this poem by Alexander Riese¹ is based on only two manuscripts: Parisinus 6880, saec. ix-x (= C) and Arundelianus 166, saec. x-xi (= A). In addition Riese occasionally cites conjectures included by Cornarius in the margins of his edition published in 1536 (= c).²

A third manuscript of the poem which has remained unnoticed by editors and which possesses considerable textual value is codex Vat. Reg. Lat. 1661, fol. 54, saec. xii (here designated V). No author is mentioned in V, but it has the title, VERSVS AD MEDICINE LECTOREM, as contrasted with A, which has only Ad lectorem, and C, which has no title whatever.

A collation of V shows that it comes from the same archetype as AC, as is indicated by the following substantial number of instances in which all three manuscripts share the same errors: 19 pararunt] pararint CAV; 31 chalciti] chalcite CAV // chalcantho] calcantho (calchanto V) CAV; 32 lepide] lepido CAV; 35 thymbramque] tymbramque CAV; 37 sinapi] senapi CAV; 39 Rutamque c, Rutam CAV; 42 contriveris] contriris CAV; 47 fragrant] flagrant CAV; 49 Aspalathum] Aspaltum CAV; 57 cnicon] cicnon CAV; 58 pompholygemque] ponpholoumque (ponpoloumque V) CAV; 66 Idumaeis] edymiis (edimiis V) CAV; 67 Lagea] lalagea CAV; 69 sive] seu CAV; 74 placidamque] placitamque CAV.

There are several instances in which V agrees with A against C: 33 gyro C, cyro AV; 36 raphanos c, rafanos AV; 41 Idumes c, odymes C, edymes AV; 48 sty-

2. Ibid., p. 197.

^{1.} A. Riese, Anthologia Latina, part 1, fasc. 2 (Leipzig, 1906), pp. 197-200.

^{3.} The information about codex Reg. Lat. 1661 presented in this paper is based on a microfilm copy of the manuscript placed at my disposal by the Knights of Columbus Vatican Film Library at Saint Louis University.