

would reply, 'because it is so small.' Surely this is not so; if an atom were as large as a mountain it would still be 'invisible.' εἴρηται δὲ ἄτομος, οὐχ ὅτι ἐστὶν ἐλαχίστη, ἀλλ' ὅτι οὐ δύναται τμηθῆναι, ἀπαθῆς ὄσα καὶ ἀμέτοχος κενού. Even this commonplace might preclude misconception. Any body, no matter how small, is 'visible' or αἰσθητόν, if it possesses quality, that is, if it is composed of matter *with* void, that is, if it can emit εἶδωλα (Lucret. I. 687–8). Any body, no matter how large, is 'invisible' or νοητόν, if it does not possess quality, that is, if it is composed of matter *without* void, that is, if it cannot emit εἶδωλα. An atom then is invisible, not because of its smallness, but because it is without quality, being ἀμέτοχος κενού and so unable to radiate εἶδωλα. Therefore, to say of a thing that it has become 'invisible,' οὐκ αἰσθητόν or νοητόν, is equivalent to saying, not that it is too small to be seen—for light can see anything that can emit εἶδωλα—but that it has ceased to exist as a 'res genita,' or a compound of matter and void.

So much being admitted, I think Epicurus' argument amounts to this:

1. Atoms, like all finite (ὠρισμένα) bodies, whether 'visible' or 'invisible,' must have parts, that is, 'extremities' (ἀκρά, 'cacumina'), e.g. a right side and a left, to determine their shape. Without this extension, a body is neither αἰσθητόν nor νοητόν. But since the finite cannot contain the infinite, there must be a point at which the separation of these parts or 'extremities' ceases.

2. Take a visible (αἰσθητόν) body. Suppose our sight strong enough to see the smallest body existing in a qualified form (i.e. matter *plus* void); e.g. a particle of gold. To be visible, this gold body must have gold ἀκρά determining its shape. But since this body is the smallest body existing in the sphere of the visible (τὸ αἰσθητόν), its ἀκρά, which are smaller still, cannot exist on that sphere except in ἀκρά of that body. Apart from it, they would be οὐκ αἰσθητά, that is, *without* gold *parts* determining their shape. They are, therefore, as gold, *inseparable* from the body. If isolated from it, they would cease to be gold and become 'invisible' matter or atoms.

3. Next, take an invisible (νοητόν) body. Suppose our reason (our 'mental eye,' as Epicurus calls it) strong enough to conceive the smallest body existing in an *unqualified* form (i.e. matter *minus* void), e.g. the atom. To be conceivable (νοητόν), this material body must have material ἀκρά determining its shape. But since this body is the smallest body existing in the sphere of the conceivable (τὸ νοητόν), its ἀκρά, which are smaller still, cannot exist in that sphere except as ἀκρά of that body. Apart from it, they would be οὐ νοητά, that is, *without* material *parts* determining their shape. They are, therefore, as material, *inseparable* from the body. If isolated from it, they would cease to be matter and become nothing.

The conclusion therefore is, that the atom must have parts (ἀκρά), but these parts themselves are without parts, that is, without extension (ἀμετάβαρα), and therefore cannot be conceived as existing separate

from the atom. Unextended themselves, they merely supply the atom with its extension. ἐτι τε τὰ ἐλάχιστα καὶ ἀμυγή (= 'una,' Lucret. I. 604), πέρατα δὲ νομίζεν τῶν μικρῶν τὸ καταμέτρημα ἐξ αὐτῶν πρώτων ('prima,' Lucret. I. 604) τοῖς μέλλουσι καὶ ἐλάττωσι παρασκευάζοντα τῇ διὰ λόγον θεωρίᾳ ἐπὶ τῶν ἀόρατων. 'We must consider these irreducible and simple extremities as the fundamental basis which supplies the atoms with the measure of this size for the mental contemplations of the invisible,' i.e. without its extremities the atom cannot be conceived as a dimension.

These considerations point to the true meaning of Lucret. I. 749 ff.—a crucial passage which has been seriously misunderstood:

cum videamus id extremum cuiusque cacumen esse quod ad sensus nostros minimum esse videtur, conicere ut possis ex hoc, quae cernere non quis extremum quod habent, minimum consistere (in illis).

The current translation is: 'though we see that that is the bounding point of anything which seems to be least to our senses, so that from this you may infer that because the things which you do not see have a bounding point, there is a host in them'; with this explanation: 'in the visible thing, however, the *cacumen* seems to be a *minimum*, in the atom it *is* a *minimum*.' But this, as Giussani observes, is to reason from a fallacy to a fact. 'Se nel fattos percipiti c'è un inganno, l'induzione fatti per l'impercettibili non ha più fondamento.' It appears, then, that *esse videtur* here does not mean 'seems to be' but 'is seen to be,' that is, 'is really a *minimum* in the sphere of the visible (τὸ αἰσθητόν).' 'Epicurus intende un vero *minimum*, ma nel campo del percettibili.' I therefore translate, taking *id* as predicate: 'though we see that the extremity of anything is a thing which, judged by our senses, is seen to be a *minimum*, so that from this you can infer that, since things you cannot see (i.e. atoms) have an extremity, there is a *minimum* also in them' (supplying 'et illis' with Postgate), and the argument will be: since our senses tell us that the ἀκρόν of a qualified or visible body is a *minimum* in the sphere of τὸ αἰσθητόν, our reason infers that the ἀκρόν of an unqualified or invisible body (the atom) is a *minimum* in the sphere of τὸ νοητόν.

W. T. L.

EURIP. BACCH. 659.

ἡμεῖς δὲ σοι μενοῦμεν, οὐ φευξόμεθα.

ON seeing (at page 216 of the present volume of *The Classical Review*) Mr. J. U. Powell's conjecture σῶ, nominative plural of ὄω, instead of the 'awkward' σοι of the MSS., it has occurred to me that the reading here is:

ἡμεῖς δ' ἔσω μενοῦμεν, οὐ φευξόμεθα.

SAMUEL ALLEN.

Lisconnan, Dercock, Co. Antrim.