

LIBER SECUNDUS

SUAVE, mari magno turbantibus aequora ventis,
 e terra magnum alterius spectare laborem ;
 non quia vexari quemquamst iucunda voluptas,
 sed quibus ipse malis careas quia cernere suave est.
 6 suave etiam belli certamina magna tueri 5
 5 per campos instructa tua sine parte pericli.
 sed nil dulcius est bene quam munita tenere
 edita doctrina sapientum templa serena,
 despiciere unde queas alios passimque videre
 errare atque viam palantis quaerere vitae, 10
 certare ingenio, contendere nobilitate,
 noctes atque dies niti praestante labore
 ad summas emergere opes rerumque potiri.
 o miseras hominum mentes, o pectora caeca !
 qualibus in tenebris vitae quantisque periclis 15
 degitur hoc aevi quodcumquest ! nonne videre
 nil aliud sibi naturam latrare, nisi utqui
 corpore seiunctus dolor absit, mensque fruatur
 iucundo sensu cura semota metuque ?

5-6 transposed by Avancius and all recent editors except Büchner, who, like Merrill and Bailey, overlooks the fact that the transposition was rejected by ed. Juntina, Naugerius, and Wakefield 18 mensque Marullus : mente OQG

BOOK 2

PLEASANT it is, when on the great sea the winds trouble the waters, to gaze from shore upon another's great tribulation : not because any man's troubles are a delectable joy, but because to perceive what ills you are free from yourself is pleasant. Pleasant is it also to behold great encounters of warfare arrayed over the plains, with no part of yours in the peril. But nothing is more delightful than to possess lofty sanctuaries serene, well fortified by the teachings of the wise, whence you may look down upon others and behold them all astray,^a wandering abroad and seeking the path of life :—the strife of wits, the fight for precedence, all labouring night and day with surpassing toil to mount upon the pinnacle of riches^b and to lay hold on power. O pitiable minds of men, O blind intelligences ! In what gloom of life,^c in how great perils is passed all your poor span of time ! not to see that all nature barks for is this, that pain be removed away out of the body, and that the mind, kept away from care and fear, enjoy a feeling of delight !

^a Cf. Cicero, *Fin.* 1.19.62 (of the wise man as represented by Epicurus) : *cum stultorum vitam cum sua comparat, magna afficitur voluptate.*

^b 12-13 (*noctes . . . opes*) = 3.62-63.

^c For the darkness of ignorance from which Epicurus rescued mankind, cf. *e.g.* 3.1-2, 5.11-12.

The serene sanctuaries of philosophy.

Ergo corpoream ad naturam pauca videmus 20
 esse opus omnino, quae demant cumque dolorem,
 delicias quoque uti multas substernere possint ;
 gratius interdum neque natura ipsa requirit,
 si non aurea sunt iuvenum simulacra per aedes
 lampadas igniferas manibus retinentia dextris, 25
 lumina nocturnis epulis ut suppeditentur,
 nec domus argento fulget auroque renidet
 nec citharae reboant laqueata aurataque templa,
 cum tamen inter se prostrati in gramine molli
 propter aquae rivum sub ramis arboris altae 30
 non magnis opibus iucunde corpora curant,
 praesertim cum tempestas adridet et anni
 tempora conspergunt viridantis floribus herbas.
 nec calidae citius decedunt corpore febres,
 textilibus si in picturis ostroque rubenti 35
 iacteris, quam si in plebeia veste cubandum est.
 Quapropter quoniam nil nostro in corpore gazae
 proficiunt neque nobilitas nec gloria regni,
 quod superest, animo quoque nil prodesse putandum ;
 si non forte, tuas legiones per loca campi 40
 fervere cum videas belli simulacra cientis,

41 *Nonius, p. 308 Lindsay, quotes from Lucr. 2 fervere cum videas classem lateque vagari. Some editors insert this line after 43 ; Munro, following A. G. Roos, places it after 46 ; others, probably rightly, regard it as a misquotation of 41*

^a According to Epicurus, pleasure is limited, and the limit of pleasure for the body is reached when the natural and necessary desires are satisfied and the pain caused by want is removed. Cf. e.g. Epicurus, *Ep. ad Men.* 130-131, *Sent.* 3, 18, Cicero, *Fin.* 1.11.38.

²⁰ Therefore we see that few things altogether Luxury is necessary for the bodily nature, only such in each of no use case as take pain away,^a and can also spread for our for body use many delights ; nor does nature herself ever crave anything more pleasurable, if there be no golden images of youths about the house, upholding fiery torches in their right hands that light may be provided for nightly revellings,^b if the hall does not shine with silver and glitter with gold, if no cross-beams panelled and gilded echo the lyre, when all the same ^c stretched forth in groups upon the soft grass beside a rill of water under the branches of a tall tree men merrily refresh themselves at no great cost, especially when the weather smiles, and the season of the year besprinkles the green herbage with flowers.^d And no quicker do hot fevers fly away from your body, if you have pictured tapestry and blushing purple to toss upon, than if you must lie sick under the poor man's blanket.

³⁷ Therefore, since treasures profit nothing for our body, nor noble birth nor the glory of royalty, we must further think that for the mind also they are or mind ; unprofitable ; unless by any chance, when you behold your legions seething over the spacious Plain ^e as they evoke war in mimicry, established firm with

^b 24-26 are in imitation of Homer, *Od.* 7.100-102.

^c That is, despite the lack of the luxuries listed in 24-26. The desire for such luxuries is neither natural nor necessary, and therefore must be banished. For Epicurus' classification of desires, see *Ep. ad Men.* 127, *Sent.* 29, Cicero, *Fin.* 1.13.45.

^d 29-33 are repeated, with minor alterations, in 5.1392-1396. For the significance of the repetition, see B. Farrington in *Hermathena* 81 (1953) 59-62.

^e *campi* (40) probably refers to the Campus Martius at Rome. Cf. 323-332.

subsidiis magnis et equum vi constabilitas,
 ornatas armis pariter pariterque animatas,
 his tibi tum rebus timefactae religiones
 effugiunt animo pavidae, mortisque timores 45
 tum vacuum pectus linquunt curaque solutum.
 quod si ridicula haec ludibriaque esse videmus,
 re veraque metus hominum curaeque sequaces
 nec metuunt sonitus armorum nec fera tela
 audacterque inter reges rerumque potentis 50
 versantur neque fulgorem reverentur ab auro
 nec clarum vestis splendorem purpureai,
 quid dubitas quin omni' sit haec rationi' potestas,
 omnis cum in tenebris praesertim vita laboret?
 nam veluti pueri trepidant atque omnia caecis 55
 in tenebris metuunt, sic nos in luce timemus
 interdum nilo quae sunt metuenda magis quam
 quae pueri in tenebris pavitant finguntque futura.
 hunc igitur terrorem animi tenebrasque necessesst
 non radii solis neque lucida tela diei 60
 discutiant, sed naturae species ratioque.

Nunc age, quo motu genitalia materiai
 corpora res varias gignant genitasque resolvant,
 et qua vi facere id cogantur, quaeque sit ollis

42-43 omitted by Q which indicates a lacuna of three lines :
 written in uncials by OG : transposed by Bailey 42
 et eum (=equum) vi Munro (the form eum has manu-
 script authority in 4.420) : epicuri OGABT^r : et opum vi
 Büchner, comparing Ennius, Ann. 161, 412 43 pariter
 (after armis) Bernays (pariter pariterque occurs 3.457, and
 here the first pariter may have been omitted by haplography
 (cf. 4.653), or there may have been a blot in the middle of 43
 and 42) : itastatuas O, with dots under at, to indicate that
 the letters should be omitted : itasiuas (itastuas, according to

mighty supports and a mass of cavalry, marshalled
 all in arms cap-à-pie and all full of one spirit, then
 these things scare your superstitious fears and drive
 them in panic flight from your mind, and death's
 terrors then leave your heart unpossessed and free
 from care. But if we see these things to be ridiculous
 and a mere mockery, if in truth men's fears and
 haunting cares fear neither the clang of arms nor
 wild weapons, if they boldly mingle with kings and
 sovereigns of the world, if they respect not the sheen
 of gold nor the glowing light of crimson raiment, why
 doubt you that this power wholly belongs to reason,
 especially since life is one long struggle in the dark?
 For just as children tremble and fear all things in
 blind darkness, so we in the light fear, at times, things
 that are no more to be feared than what children
 shiver at in the dark and imagine to be at hand.^a
 This terror of the mind, therefore, and this gloom
 must be dispelled, not by the sun's rays nor the bright
 shafts of day, but by the aspect and law of nature.^b

only philo-
 sophy can
 help us.

⁶² Listen now, and I will set forth by what motion I. Atomic
 the generative bodies of matter beget the various motion
 things and dissolve them once begotten, and by what (62-332).
 force they are compelled to do it, and what swiftness Atoms are
 motion,

^a Cf. the opening words of Francis Bacon's essay *Of Death* : "Men fear death as children fear to go into the dark ; and as that natural fear in children is increased with tales, so is the other."

^b 55-61 = 3.87-93, 6.35-41. 59-61 = 1.146-148.

some recent editors) G : statuas Itali (according to recent
 editors, but ita statuas is the reading of the ed. Veronensis and
 ed. Veneta) 46 pectus Lambinus : tempus OQGP, Wake-
 field (comparing Terence, Haut. 90)

reddita mobilitas magnum per inane meandi, 65
expediam; tu te dictis praebere memento.

Nam certe non inter se stipata cohaeret
materies, quoniam minui rem quamque videmus
et quasi longinquo fluere omnia cernimus aevo
ex oculisque vetustatem subducere nostris, 70
cum tamen incolumis videatur summa manere
propterea quia, quae decedunt corpora cuique,
unde abeunt minuunt, quo venere augmine donant,
illa senescere, at haec contra florescere cogunt,
nec remorantur ibi. sic rerum summa novatur 75
semper, et inter se mortales mutua vivunt:
augescunt aliae gentes, aliae minuuntur,
inque brevi spatio mutantur saecula animantum
et quasi cursores vitae lampada tradunt.

Si cessare putas rerum primordia posse 80
cessandoque novos rerum progignere motus,
avius a vera longe ratione vagaris.
nam quoniam per inane vagantur, cuncta necesest
aut gravitate sua ferri primordia rerum
aut ictu forte alterius. nam cum cita saepe 85
obvia confluxere, fit ut diversa repente
dissiliant; neque enim mirum, durissima quae sint
ponderibus solidis neque quicquam a tergo ibus obstet.

85 quom (=cum *Lachmann*) cita *Wakefield* (in his notes,
but not in his text): cita *OQGAB* 86 confluxere *F*
(*Lambinus*, to whom some modern editors attribute the reading,
found it "in quibusdam libris manuscriptis" and did not
print it in his text, though he thought it a "scriptura proba-
bilis": confluxere *OQG*: confluxere *BL* 88 tergo ibus
Isaac Voss: tergibus *OQGP*, *Diels*, *Martin*, *Büchner*

^a The metaphor is from the Athenian lampadedromy (relay torch-race), as in Plato, *Leg.* 776 B (quoted by *Lambinus*): γεννώντάς τε καὶ ἐκτρέφοντάς παιδας, καθάπερ λαμπάδα
100

has been given them to travel through the great void; do you remember to give heed to my words.

⁶⁷ For certainly matter is not one packed and coherent mass, since we see each thing decreasing, and we perceive all things as it were ebbing through length of time, and age withdrawing them from our eyes; although nevertheless the sum is seen to remain unimpaired for this reason, that whenever bodies pass away from a thing, they diminish that from which they pass and increase that to which they have come, they compel the first to fade and the second on the contrary to bloom, yet do not linger there. Thus the sum of things is ever being renewed, and mortal creatures live dependent one upon another. Some species increase, others diminish, and in a short space the generations of living creatures are changed and, like runners, pass on the torch of life.^a

increasing
this, dimin-
ishing that,
while the
sum
remains
unchanged.

⁸⁰ If you think the first-beginnings of things can stand still, and by standing still can beget new motions amongst things, you are astray and wander far from true reasoning.^b For since the first-beginnings of things wander through the void, they must all be carried on either by their own weight or by a chance blow from another atom. For when in quick motion they have often met and collided, it follows that they leap apart suddenly in different directions; and no wonder, since they are perfectly hard in their solid weight and nothing obstructs them from behind. τὸν βίον παραδιδόντας ἄλλοις ἐξ ἄλλων = "begetting and rearing children, and so handing on life, like a torch, to successive generations." Pius compares Varro, *Rust.* 3.16.9, Persius 6.61.

^b Epicurus deals briefly with atomic motion in *Ep. ad Hdt.* 43-44, 61-62.

et quo iactari magis omnia materiali
 corpora pervideas, reminiscere totius imum 90
 nil esse in summa, neque habere ubi corpora prima
 consistant, quoniam spatium sine fine modoquest,
 immensumque patere in cunctas undique partis
 pluribus ostendi et certa ratione probatumst.
 quod quoniam constat, nimirum nulla quies est 95
 reddita corporibus primis per inane profundum,
 sed magis adsiduo varioque exercita motu
 partim intervallis magnis confulta resultant,
 pars etiam brevibus spatiis vexantur ab ictu.
 et quaecumque magis condense conciliatu 100
 exiguis intervallis convecta resultant,
 indupedita suis perplexis ipsa figuris,
 haec validas saxi radices et fera ferri
 corpora constituunt et cetera de genere horum.
 cetera, quae porro magnum per inane vagantur, 105
 paucula dissiliunt longe longeque recursant
 in magnis intervallis; haec aera rarum
 sufficiunt nobis et splendida lumina solis.
 multaque praeterea magnum per inane vagantur,
 conciliis rerum quae sunt reiecta nec usquam 110
 consociare etiam motus potuere recepta.

Cuius, uti memoror, rei simulacrum et imago
 ante oculos semper nobis versatur et instat.
 contemplator enim, cum solis lumina cumque

105-106 *Merrill's (1917 ed.) transposition of paucula (paucula OQG) and cetera is adopted with much hesitation. It is adopted as being somewhat less drastic than Purmann's exclusion of 105 as a variant for 109; however, paucula is surprising, and magnum per inane vagantur seems a strange description of atoms in compounds, however loose the compounds may be, and Purmann may be right* 112 *memoror OQGP: memoro Codex Vaticanus Reg. lat. 1706 simulacrum Itali: simulacra OQG, Merrill (1917), Diels, Büchner*

And to show you more clearly that all the bodies of matter are constantly being tossed about, remember that there is no bottom in the sum of things and the first bodies have nowhere to rest, since space is without end or limit, and I have shown at large and proved by irrefragable reasoning that it extends immeasurable from all sides in all directions.^a Since this stands firm, beyond doubt no rest is granted to the first bodies throughout the profound void, but rather driven by incessant and varied motions, some after being pressed together then leap back with wide intervals, some again after the blow are tossed about within a narrow compass. And all those which being held in combination more closely condensed collide and leap back through tiny intervals, caught fast in the complexity of their own shapes, these constitute the strong roots of stone and the bulk of fierce iron and the others of their kind. Of the rest, which go on wandering through the great void, a very few leap far apart and pass far back with long intervals between: these supply thin air for us and the gleaming light of the sun. And many besides wander through the great void which have been rejected from combination with things, and have nowhere been able to obtain admittance and also harmonize their motions.^b

¹¹² Of this fact there is, I recall, an image and similitude always moving and present before our eyes. Do but apply your scrutiny whenever the The motion of

^a See 1.958-1007.

^b The point is that an atom cannot join a compound body, unless (as well as being of suitable size and shape) it can move in harmony with the other component atoms of the object.

inserti fundunt radii per opaca domorum : 115
 multa minuta modis multis per inane videbis
 corpora misceri radiorum lumine in ipso
 et velut aeterno certamine proelia pugnas
 edere turmatim certantia nec dare pausam,
 conciliis et discidiis exercita crebris ; 120
 conicere ut possis ex hoc, primordia rerum
 quale sit in magno iactari semper inani.
 dumtaxat rerum magnarum parva potest res
 exemplare dare et vestigia notitiae.

Hoc etiam magis haec animum te advertere par est
 corpora quae in solis radiis turbare videntur, 126
 quod tales turbae motus quoque materiai
 significant clandestinos caecosque subesse.
 multa videbis enim plagis ibi percita caecis
 commutare viam retroque repulsa reverti, 130
 nunc huc nunc illuc, in cunctas undique partis.
 scilicet hic a principiis est omnibus error :
 prima moventur enim per se primordia rerum ;
 inde ea quae parvo sunt corpora conciliatu
 et quasi proxima sunt ad viris principiorum, 135
 ictibus illorum caecis impulsa cientur,
 ipsaque porro paulo maiora lacessunt.
 sic a principiis ascendit motus et exit
 paulatim nostros ad sensus, ut moveantur
 illa quoque in solis quae lumine cernere quimus, 140
 nec quibus id faciant plagis apparet aperte.

^a *inane* (116) refers to the air (cf. Virgil, *Aen.* 12.906) through which the motes move, not to void in the strict scientific sense. But, like *corpora* in 117, the word is carefully chosen in order to emphasize the parallel with the behaviour of the atoms.

sun's rays are let in and pour their light through a dark room : you will see many minute particles mingling in many ways throughout the void ^a in the light itself of the rays, and as it were in everlasting conflict struggling, fighting, battling in troops without any pause, driven about with frequent meetings and partings ; so that you may conjecture from this what it is for the first-beginnings of things to be ever tossed about in the great void. So far as it goes, a small thing may give an analogy of great things, and show the tracks of knowledge.

¹²⁵ Even more for another reason it is proper that you give attention to these bodies which are seen to be in turmoil within the sun's rays, because such turmoil indicates that there are secret and unseen motions also hidden in matter. For there you will see how many things set in motion by unseen blows change their course and beaten back return back again, now this way, now that way, in all directions. You may be sure that all take their restlessness from the first-beginnings. For first the first-beginnings of things move of themselves ; then the bodies that form a small combination ^b and, as one may say, are nearest to the powers of the first-beginnings, are set moving, driven by the unseen blows of these, while they in their turn attack those that are a little larger. Thus the movement ascends from the first-beginnings and by successive degrees emerges upon our senses, ^c so that those bodies also are moved which we are able to perceive in the sun's light, yet it does not openly appear by what blows they are made to do so.

^b Small atomic aggregates.

^c For the imperceptibility of the motions of the atoms, see 308-332.

Nunc quae mobilitas sit reddita materiai
 corporibus, paucis licet hinc cognoscere, Memmi.
 primum aurora novo cum spargit lumine terras,
 et variae volucres nemora avia pervolitantēs 145
 aera per tenerum liquidis loca vocibus opplent,
 quam subito solet sol ortus tempore tali
 convestire sua perfundens omnia luce,
 omnibus in promptu manifestumque esse videmus.
 at vapor is quem sol mittit lumenque serenum 150
 non per inane meat vacuum; quo tardius ire
 cogitur, aerias quasi dum diverberat undas.
 nec singillatim corpuscula quaeque vaporis
 sed complexa meant inter se conque globata;
 quapropter simul inter se retrahuntur et extra 155
 efficiuntur, uti cogantur tardius ire.
 at quae sunt solida primordia simplicitate,
 cum per inane meant vacuum nec res remoratur
 ulla foris, atque ipsa, suis e partibus unum,
 unum in quem coepere locum conixa feruntur, 160
 debent nimirum praecellere mobilitate
 et multo citius ferri quam lumina solis
 multiplexque loci spatium transcurrere eodem
 tempore quo solis pervolgant fulgura caelum.

nec persectari primordia singula quaeque, 165
 ut videant qua quidque geratur cum ratione.

152 undas OQGP: umbras F. H. Sandbach, CR N.S. 13
 (1963) 13-14 164-165 A lacuna between these lines noted
 by Pontanus. The lost passage was probably of considerable
 length (fifty-two lines, if, as is likely, a leaf of the archetype was
 missing). In view of primum (144), there must have been at least
 one further argument for the speed of the atoms, and the opening
 of the next paragraph (167 ff.) suggests that Lucr. may have
 gone on to explain how the atoms, by their movements, formed
 and form the world and everything in it 166 videant
 FL: deant OQG: omitted and space left by AB

142 Now Memmius, what swiftness is granted to the bodies of matter, you may understand from what follows in a few words. First, when the dawn diffuses new light over the earth, and the different birds fitting about through pathless woods through the soft air fill every part with their liquid notes, how suddenly at such time the sun arising is accustomed to envelop and flood the whole world with his light, we see to be plain and manifest to all. But that heat and that light serene which the sun sends, does not pass through empty void; therefore it is forced to go more slowly, while it beats its way so to speak through waves of air. Nor do the particles of heat move alone and singly, but linked together and massed together; therefore they are at the same time retarded by one another and obstructed from without, so that they are forced to go more slowly. But the first-beginnings, which are of solid singleness, when they pass through the empty void, are not delayed by anything from without, and being themselves units composed of their own parts,^a when they are carried each to that one point to which their first efforts tend, most certainly they must be of exceeding swiftness and must be carried far more quickly than the light of the sun, and traverse a space many times as wide in the same time that the sun's lightnings take to pervade the heavens.

165 . . . nor^b to follow up the first-beginnings separately one by one, that they may see in what way everything is done.

^a Although each atom has a number of minimal parts, it is uncompounded, for the minimal parts are physically inseparable (cf. 1.599-634).

^b For comments on the lacuna, see critical note on 164-165.

At quidam contra haec, ignari materiai,
 naturam non posse deum sine numine credunt
 tanto opere humanis rationibus admoderate
 tempora mutare annorum frugesque creare, 170
 et iam cetera, mortalis quae suadet adire
 ipsaque deducit dux vitae dia voluptas
 et res per Veneris blanditur saecula propagent,
 ne genus occidat humanum. quorum omnia causa
 constituisse deos cum fingunt, omnibu' rebus 175
 magno opere a vera lapsi ratione videntur.
 nam quamvis rerum ignorem primordia quae sint,
 hoc tamen ex ipsis caeli rationibus ausim
 confirmare aliisque ex rebus reddere multis,
 nequaquam nobis divinitus esse creatam 180
 naturam mundi : tanta stat praedita culpa.
 quae tibi posterius, Memmi, faciemus aperta.
 nunc id quod superest de motibus expediemus.

Nunc locus est, ut opinor, in his illud quoque rebus
 confirmare tibi, nullam rem posse sua vi 185
 corpoream sursum ferri sursumque meare.
 ne tibi dent in eo flammaram corpora fraudem ;
 sursus enim versus gignuntur et augmina sumunt,
 et sursum nitidae fruges arbustaque crescunt,
 pondera, quantum in se est, cum deorsum cuncta
 ferantur. 190
 nec cum subsiliunt ignes ad tecta domorum
 et celeri flamma degustant tigna trabesque,

168 credunt *Pontanus* : reddi *OQGP*, *Wakefield*, *Büchner* :
 reddunt (cf. 179) *Brieger* : rentur (cf. 1.164, 6.91) *Marullus*
 181 tanta stat (cf. 5.190) *Lachmann* : quamquam *OQG* : quae
 tanta est *Pontanus* : quanta stat *J. P. Postgate*, *Journ. Phil.*
16 (1888) 127

¹⁶⁷ But some ^a in opposition to this, knowing nothing
 of matter, believe that without the gods' power
 nature cannot with so exact conformity to the plans
 of mankind change the seasons of the year, and pro-
 duce crops, and in a word all else which divine
 pleasure, the guide of life, persuades men to ap-
 proach, herself leading them and coaxing them,
 through the ways of Venus, to beget their genera-
 tions, that the human race may not come to an end.
 But when they imagine the gods to have arranged all
 for the sake of men, they are seen to have departed
 widely from true reasoning in every way. For
 although I might not know what first-beginnings of
 things are, this nevertheless I would make bold to
 maintain from the ways of heaven itself, and to de-
 monstrate from many another source, that the nature
 of the universe has by no means been made for us
 through divine power : so great are the faults it
 stands endowed with. All this, Memmius, I will
 make clear to you later ^b ; now I will explain what
 remains to be said about motion.

But some
 believe that
 the gods
 made the
 world for
 man ;

now it is
 too faulty
 for that.

¹⁸⁴ This is now the place, as I think, in my theme
 to establish for you another principle : that no bodily
 thing can of its own power be carried upwards and
 move upwards. The particles of fire should not lead
 you into a mistake ; for in an upward direction flames
 are born and win increase, upwards grow trees and
 the bright crops, although all weights tend down-
 wards as far as in them lies. And when fires leap up
 to the roofs of houses and with swift flame devour

No bodily
 thing can
 move up-
 wards un-
 less driven
 by some
 force.

^a " Haec disputantur in Platonem, et in Stoicos " (*Lam-
 binus*).

^b 5.195-234.

sponte sua facere id sine vi subiecta putandum est.
 quod genus e nostro cum missus corpore sanguis
 emicat exultans alte spargitque cruorem. 195
 nonne vides etiam quanta vi tigna trabesque
 respuat umor aquae? nam quo magis ursimus altum
 directa et magna vi multi pressimus aegre,
 tam cupide sursum revomit magis atque remittit,
 plus ut parte foras emergant exiliantque. 200
 nec tamen haec, quantum est in se, dubitamus, opinor,
 quin vacuum per inane deorsum cuncta ferantur.
 sic igitur debent quoque flammae posse per auras
 aeris expressae sursum succedere, quamquam
 pondera, quantum in sest, deorsum deducere pugnent.
 nocturnasque faces caeli sublime volantis 206
 nonne vides longos flammarum ducere tractus
 in quascumque dedit partis natura meatum?
 non cadere in terras stellas et sidera cernis?
 sol etiam caeli de vertice dissipat omnis 210
 ardorem in partis et lumine conserit arva;
 in terras igitur quoque solis vergitur ardor.
 transversosque volare per imbris fulmina cernis:

193 sine OQGP: nisi D. A. West, *CQ N.S. 14* (1964) 96
 subiecta (sc. flammarum corpora 187) OQGP (cf. Virgil, *G.*
 4.385): subigente Lambinus, who notes "sic restitui ab uno
 codice manuscripto adiutus" 197 altum seemingly first
 printed in ed. Juntina (notes): altu OQG: alte F: alta
 ABL 199 revomit Pontanus: removet OQGP, Bocke-
 müller, Merrill (1917), Martin, D. A. West, *CQ N.S. 14*
 (1964) 97, but the more violent and vivid word seems more
 probable, and for the corruption cf. 6.328, where QU have
 movenda for vomenda, and (e.g.) Lucan 6.24 203
 debent quoque flammae Wakefield (notes only). It seems
 preferable to the readings of ed. Aldina and Q corr. because
 the transposition affects only two words instead of three:
 quoque debent flammae OQG: debent flammae quoque ed.
 Aldina (cf. 1.290, but 6.317 shows that a different order is
 possible): flammae quoque debent Q corr., D. A. West, *Rh.*

110

timbers and beams, we must not think they do this
 of themselves, being shot up without a force. Even
 so when blood is let out from our body, out it spirts,
 leaping forth on high and sprinkling its red drops.
 Do you not see also with what force liquid water
 spits out timbers and beams? For the deeper we
 have thrust them and pushed them right down, press-
 ing laboriously with full force and many together,
 the more eagerly does the water vomit them back
 and shoot them back up, so that they issue forth and
 leap out more than half their length. Yet we do not
 doubt, I think, that, as far as in them lies, these are
 all carried downwards through an empty void. In
 this way, therefore, flames also must be able to rise
 up, squeezed out upwards through the breezes of the
 air, although, as far as lies in them, their weights
 fight to draw them down; and do you not see how
 the nightly torches of the sky fly up aloft and draw
 their long trails of flame in whatever direction nature
 has given them a way? how stars and luminaries
 fall to the earth? The sun also from the pinnacle of
 heaven disperses his heat abroad in all directions and
 sows the fields with light; therefore the sun's heat
 tends towards the earth also. And you perceive
 lightnings to fly crosswise along the rain clouds:

Wakefield quotes Milton, *Paradise Lost* 5.1-2: "Now
 Morn, her rosy steps in th' eastern clime | Advancing, sow'd
 the earth with orient pearl."

Mus. 110 (1967) 195 209 terras (cf. 212, 215) Havet,
 Martin: terra OQG: terram P 210 caeli (cf. Cicero,
Arat. 297) Bernays: omitted by OQG: summo FL: mundi
 Stürenberg, W. Hörschelmann (according to Merrill), E.
 Orth, *Helmantica 11* (1960) 128-129, C. L. Howard, *CPhil.*
 56 (1961) 149

111

nunc hinc nunc illinc abrupti nubibus ignes
concursant ; cadit in terras vis flammea volgo. 215

Illud in his quoque te rebus cognoscere avemus,
corpora cum deorsum rectum per inane feruntur
ponderibus propriis, incerto tempore ferme
incertisque locis spatio depellere paulum,
tantum quod momen mutatum dicere possis. 220
quod nisi declinare solerent, omnia deorsum,
imbris uti guttae, caderent per inane profundum,
nec foret offensus natus nec plaga creata
principiis : ita nil umquam natura creasset.

Quod si forte aliquis credit graviora potesse
corpora, quo citius rectum per inane feruntur,
incidere ex supero levioribus atque ita plagas
gignere quae possint genitales reddere motus,
avius a vera longe ratione recedit.

nam per aquas quaecumque cadunt atque aera rarum,
haec pro ponderibus casus celerare necessest, 231
propterea quia corpus aquae naturaeque tennis
aeris haud possunt aequae rem quamque morari,
sed citius cedunt gravioribus exsuperata ;
at contra nulli de nulla parte neque ullo 235
tempore inane potest vacuum subsistere rei,
quin, sua quod natura petit, concedere pergat ;

214 abrupti OQGP : abruptis Macrobius, *Sat.* 6.1.27 (cf. *Virgil, Aen.* 3.199), *D. A. West, CQ N.S.* 14 (1964) 97, n. 1, perhaps rightly, but see Statius, *Theb.* 1.353-354 quoted by Wakefield

^a For a detailed discussion of 184-215, see D. A. West, *CQ N.S.* 14 (1964) 94-99.

^b The theory of the swerve (*παρέγκλισις, clinamen, declinatio, inclinatio*) of atoms is not described by Epicurus in his extant writings, but is mentioned by Cicero, Philodemus, Plutarch, Diogenes of Oenoanda, and others.

now from this part, now from that, burst the fires
out of the clouds and rush along ; it is a common
thing for the fiery bolt to fall on the earth.^a

216 One further point in this matter I desire you
to understand : that while the first bodies are being
carried downwards by their own weight in a straight
line through the void, at times quite uncertain and
uncertain places, they swerve a little from their
course, just so much as you might call a change of
motion.^b For if they were not apt to incline, all
would fall downwards like raindrops through the pro-
found void, no collision would take place and no blow
would be caused amongst the first-beginnings : thus
nature would never have produced anything.

225 But if by chance anyone believes it to be
possible that heavier elements, being carried more
quickly straight through the void, fall from above on
the lighter, and so deal blows which can produce
generative motions, he is astray and departs far from
true reasoning. For whatever things fall through
water and through fine air, these must speed their
fall in accordance with their weights, because the
body of water and the thin nature of air cannot
delay each thing equally, but yield sooner overcome
by the heavier ; but contrariwise empty void cannot
offer any support to anything anywhere or at any
time, but it must give way continually, as its nature

Lucr.'s account (216-293) is the fullest which we have. Epicurus, influenced above all by Aristotle, rejected the determinism of Democritus and believed in the freedom of the individual will, and the theory of the atomic swerve was designed to explain free will (see 251-293) as well as to account for collisions between atoms moving through the void. See Introduction pp. xxxiii-xxxiv.

omnia quapropter debent per inane quietum
 aequae ponderibus non aequis concita ferri.
 haud igitur poterunt levioribus incidere umquam 240
 ex supero graviora, neque ictus gignere per se
 qui variant motus per quos natura gerat res.
 quare etiam atque etiam paulum inclinare necessest
 corpora ; nec plus quam minimum, ne fingere motus
 obliquos videamur et id res vera refutet. 245

namque hoc in promptu manifestumque esse videmus,
 pondera, quantum in sest, non posse obliqua meare,
 ex supero cum praecipitant, quod cernere possis ;
 sed nil omnino recta regione viai
 declinare quis est qui possit cernere sese ? 250

Denique si semper motus conecitur omnis
 et vetere exoritur motu novus ordine certo,
 nec declinando faciunt primordia motus
 principium quoddam quod fati foedera rumpat,
 ex infinito ne causam causa sequatur, 255
 libera per terras unde haec animantibus exstat,
 unde est haec, inquam, fatis avolsa voluntas,
 per quam progredimur quo ducit quemque voluptas,
 declinamus item motus nec tempore certo
 nec regione loci certa, sed ubi ipsa tulit mens ? 260
 nam dubio procul his rebus sua cuique voluntas
 principium dat et hinc motus per membra rigantur.

Nonne vides etiam patefactis tempore puncto

249 recta *FL*: omitted by *OQG* 250 sese *OQGP*:
 sensu *Giussani*: posse *L. A. MacKay, CPhil. 56 (1961) 103-104*
 251 motus *ABCF*: motu *OQGL, Martin* 252
 motu *Havel, Bailey*: omitted by *OQG*: semper *CFL*:
 motus *Bockemüller, Martin* 257 voluntas *Lambinus*:
 voluptas *OQUP, L. A. MacKay, CPhil. 56 (1961) 104*:
 potestas *Lachmann* 258 voluptas (*cf. Virgil, Ecl. 2.65*)
ABF, Lambinus: voluntas *OQU*

demands: therefore they must all be carried with
 equal speed, although not of equal weight, through
 the unresisting void. So the heavier bodies will
 never be able to fall from above on the lighter, nor
 deal blows of themselves so as to produce the various
 motions by which nature carries on her processes.
 Therefore again and again I say, the bodies must
 incline a little; and not more than the least possible,
 or we shall seem to assume oblique movements, and
 thus be refuted by the facts. For this we see to be
 manifest and plain, that weights, as far as in them
 lies, cannot travel obliquely, when they drop straight
 from above, as far as one can perceive; but who is
 there who can perceive that they never swerve ever
 so little from the straight undeviating course ?

²⁵¹ Again, if all motion is always one long chain,
 and new motion arises out of the old in order in-
 variable, and if the first-beginnings do not make by
 swerving a beginning of motion such as to break the
 decrees of fate, that cause may not follow cause
 from infinity, whence comes this free will in living
 creatures all over the earth, whence I say is this will
 wrested from the fates by which we proceed whither
 pleasure leads each, swerving also our motions not at
 fixed times and fixed places, but just where our mind
 has taken us? ^a For undoubtedly it is his own will
 in each that begins these things, and from the will
 movements go rippling through the limbs.

²⁶³ Do you not see also, when the cells ^b are thrown
^a For a detailed discussion of the Epicurean theory of
 voluntary action, often very critical of the traditional view,
 see D. J. Furley, *Two Studies in the Greek Atomists* 161-237.
 Furley devotes a chapter to *Lucr. 2.251-293*.
^b *carceres* are the cells in which horses and chariots were
 confined at the start of a race. *Cf. 4.990*.

carceribus non posse tamen prorumpere equorum
 vim cupidam tam de subito quam mens avet ipsa? 265
 omnis enim totum per corpus material
 copia conciri debet, concita per artus
 omnis ut studium mentis conixa sequatur ;
 ut videas initum motus a corde creari
 ex animique voluntate id procedere primum, 270
 inde dari porro per totum corpus et artus.

Nec similest ut cum impulsi procedimus ictu
 viribus alterius magnis magnoque coactu ;
 nam tum materiem totius corporis omnem
 perspicuumst nobis invitis ire rapique, 275
 donec eam refrenavit per membra voluntas.
 iamne vides igitur, quamquam vis externa multos
 pellat et invitos cogat procedere saepe
 praecipitesque rapi, tamen esse in pectore nostro
 quiddam quod contra pugnare obstareque possit? 280
 cuius ad arbitrium quoque copia material
 cogitur interdum flecti per membra per artus
 et proiecta refrenatur retroque residit.

Quare in seminibus quoque idem fateare necessest,
 esse aliam praeter plagas et pondera causam 285
 motibus, unde haec est nobis innata potestas,
 de nilo quoniam fieri nil posse videmus.
 pondus enim prohibet ne plagis omnia fiant
 externa quasi vi ; sed ne mens ipsa necessum

268 conixa (= conixa Lachmann) ascribed to certain mss
 by Lambinus: conixa OQU 279 pectore nostro .11':
 iectore no Q1': iectore OBL: perhaps pectore nobis
 289 mens Lambinus: res OQLP, recently defended by
 several scholars, including I. Avotins, CQ N.S. 29 (1979)
 95-100, M. Pope, Symb. OsI. 61 (1986) 96 n.57

^a The metaphor here (*refrenavit*) and in 282 (*flecti*) and
 283 (*refrenatur*) was probably suggested to Lucr. by the race-
 course illustration in 263-265. A further link between 263-

open at a given moment, that nevertheless the eager
 force of the horses cannot burst forth so suddenly as
 the mind itself craves? For all the mass of matter
 must be stirred up together through the whole body,
 in order that thus stirred up together it may all with
 one combined effort follow the passion of the mind ;
 thus you may see that the beginning of motion is
 made by the intelligence, and the action moves on
 first from the will of the mind, then to be passed
 onwards through the whole body and limbs.

272 Nor is this the same as when we move for-
 wards impelled by a blow from the strength and
 mighty effort of another ; for then it is clear that all
 the matter of the whole body moves and is hurried
 against our will, until the will has curbed^a it back
 through the limbs. In this case do you see then
 that, although an external force propels many men
 and forces them often to move on against their will
 and to be hurried headlong, yet there is in our
 breast something strong enough to fight against it
 and to resist? by the arbitrament of which, also, the
 mass of matter is compelled at times to be turned
 throughout body and limbs, and, when thrust for-
 ward, is curbed back and settles back steadily.

284 Therefore you must admit that the same exists
 in the seeds also, that motions have some cause other
 than blows and weights, from which this power is
 born in us, since we see that nothing can be produced
 from nothing. For it is weight that prevents all
 things from being caused through blows by a sort of
 external force ; but what keeps the mind itself

265 and the present passage is that in 277-279 Lucr. is prob-
 ably thinking of a crowd at the races. See M. F. Smith in
Hermathena 102 (1966) 76-77, and notes on 5.1290, 1436.

LUCRETIUS

intestinum habeat cunctis in rebus agendis
et devicta quasi cogatur ferre patique,
id facit exiguum clinamen principiorum
nec regione loci certa nec tempore certo.

290

DE RERUM NATURA, 2. 290-314

from having necessity within it in all actions, and
from being as it were mastered and forced to endure
and to suffer, is the minute swerving of the first-
beginnings at no fixed place and at no fixed time.