On the Nature of Things

LUCRETIUS

c. 99–55 BC

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De rerum natura

Translated from the Latin with AI (Claude) and edited



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On the Nature of Things · Lucretius (c. 99–55 BC)

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CONTENTS

Introduction vii

Book I 1
- Epicurus against religion 3
- The sacrifice of Iphigenia 4
- Nothing comes from nothing 6
- The void 12
- Solid, everlasting first bodies 18
- Against the earlier philosophers 22
- Honey on the cup 32
- An infinite universe 33

Book II 41
- Atoms always in motion 43
- The swerve 48
- The shapes of atoms 52
- The Great Mother 61
- Atoms have no color 66
- Countless worlds 75

Book III 81
- The fear of death 82
- Mind and spirit 84
- The soul is mortal 95
- Death is nothing to us 109
- Hell on earth 114

Book IV 119
- Images 120
- Mirrors 128
- Illusions of sight 131
- Against the skeptic 134
- Hearing, taste and smell 136
- Images in the mind 143
- Organs were not made for a purpose 146
- Sleep and dreams 149
- Love and desire 153
- The costs of love 156
- Heredity and fertility 160

Book V 165
- The plan of Book V 167
- The gods did not make the world 170
- Proofs that the world is mortal 173

How the world was formed 179
The heavens 182
The origin of life 191
The first humans 196
The beginnings of society 199
Kings, wealth and law 202
The origin of religion 204
Metals and war 207
The arts of peace 210

Book VI 215
Thunder and lightning 219
Thunderbolts are not Jupiter's 228
Waterspouts, clouds and rain 230
Earthquakes 234
Etna and other wonders 238
The magnet 247
The causes of disease 253
The plague of Athens 255

INTRODUCTION

Titus Lucretius Carus wrote *On the Nature of Things* in the middle of the first century BC, in the last troubled decades of the Roman Republic. Almost nothing is known of his life. The poem, some 7,400 lines of Latin hexameter in six books, is addressed to a Roman aristocrat, Memmius, and sets out the philosophy of the Greek thinker Epicurus.

Its claim is that everything—stars, mountains, animals, our own minds—is made of tiny, indivisible particles moving through empty space, combining and coming apart by natural laws. There is no need for gods to run the world, and the mind dies with the body. Lucretius offers this as a cure for fear: once we understand nature, we need not dread the gods or death. "Death is nothing to us."

The poem moves from atoms and the void (Books I–II) to the mortality of the soul (III), the senses, dreams and love (IV), the origin of the world, of life and of human society (V), and the causes of thunder, earthquakes and disease, ending with the plague of Athens (VI). It was nearly lost; a single manuscript, rediscovered in 1417, helped shape the scientific revolution.

Book I

Matter and void
Hymn to Venus; nothing comes from nothing; atoms and empty space; the universe is infinite.

	LATIN	ENGLISH
1.1	Aeneadum genetrix, hominum divomque voluptas, alma Venus, caeli subter labentia signa quae mare navigerum, quae terras frugiferentis concelebras, per te quoniam genus omne animantum concipitur visitque exortum lumina solis: te, dea, te fugiunt venti, te nubila caeli adventumque tuum, tibi suavis daedala tellus summittit flores, tibi rident aequora ponti placatumque nitet diffuso lumine caelum. nam simul ac species patefactast verna diei et reserata viget genitabilis aura favoni, aeriae primum volucris te, diva, tuumque significant initum perculsae corda tua vi. inde ferae pecudes persultant pabula laeta et rapidos tranant amnis: ita capta lepore te sequitur cupide quo quamque inducere pergis.	Mother of Aeneas' people, delight of men and gods, life-giving Venus, who beneath the gliding signs of heaven fill the ship-bearing sea and the fruitful lands with your presence, since through you every kind of living thing is conceived and, rising, looks upon the light of the sun: you, goddess, you the winds flee, you the clouds of heaven, you and your coming; for you the inventive earth sends up sweet flowers, for you the wide waters of the sea laugh, and the sky, at peace, shines with light spread everywhere. For as soon as the springtime face of day is revealed and the west wind's breath of birth, set free, blows strong, first the birds of the air, goddess, announce you and your arrival, their hearts struck by your power. Then the herds run wild and leap across the lush pastures and swim the rushing rivers: so, captured by your charm, each follows you eagerly wherever you go on to lead it.[1]
	/ denique per maria ac montis fluviosque rapacis frondiferasque domos avium camposque virentis omnibus incutiens blandum per pectora amorem efficis ut cupide generatim saecla propagent. quae quoniam rerum naturam sola gubernas nec sine te quicquam dias in luminis oras exoritur neque fit laetum neque amabile quicquam, te sociam studeo scribendis versibus esse,	/ Then, through seas and mountains and sweeping rivers, through the leafy homes of birds and the greening plains, striking the sweet enticement of love into every breast, you make them eagerly carry on their generations, kind by kind.

1 The Romans traced their descent from Aeneas, son of Venus.

	LATIN	ENGLISH
	quos ego de rerum natura pangere conor Memmiadae nostro, quem tu, dea, tempore in omni omnibus ornatum voluisti excellere rebus. quo magis aeternum da dictis, diva, leporem.	Since you alone steer the nature of things, and without you nothing springs up into the shining shores of light, nothing comes to be that is joyful or lovely, I long to have you as my partner in writing the verses which I am trying to compose on the nature of things for our Memmius, whom you, goddess, have willed at all times to stand out, adorned with every gift. So all the more, goddess, give my words an undying charm.[2]
	/ effice ut interea fera moenera militiai per maria ac terras omnis sopita quiescant; nam tu sola potes tranquilla pace iuvare mortalis, quoniam belli fera moenera Mavors armipotens regit, in gremium qui saepe tuum se reiicit aeterno devictus vulnere amoris, atque ita suspiciens tereti cervice reposta pascit amore avidos inhians in te, dea, visus eque tuo pendet resupini spiritus ore. hunc tu, diva, tuo recubantem corpore sancto circum fusa super, suavis ex ore loquellas funde petens placidam Romanis, incluta, pacem; nam neque nos agere hoc patriai tempore iniquo possumus aequo animo nec Memmi clara propago talibus in rebus communi desse saluti.	/ Meanwhile, make the savage works of war fall asleep and lie at rest over every sea and land; for you alone have power to bless with tranquil peace mortal men, since the savage works of war are ruled by Mars, mighty in arms, who often flings himself back into your lap, conquered by the everlasting wound of love; and so, looking up, his shapely neck laid back, he feeds his greedy eyes on love, gazing open-mouthed at you, goddess, and as he lies back his breath hangs on your lips. As he reclines, goddess, on your holy body, pour yourself around him from above, and pour sweet words from your lips, glorious one, seeking quiet peace for the Romans. For in this unfair time for our country I cannot do this work with an even mind, nor can the noble son of the Memmii in such circumstances fail the common good.
	/ omnis enim per se divum natura necessest immortali aevo summa cum pace fruatur semota ab nostris rebus seiunctaque longe; nam privata dolore omni, privata periclis, ipsa suis pollens opibus, nihil indiga nostri, nec bene promeritis capitur nec tangitur ira.	/ For the whole nature of the gods must of itself enjoy immortal life in the deepest peace, far removed and separated from our affairs; for, free from all pain, free from dangers, strong in its own resources, needing nothing from us, it is neither won over by good service nor touched by anger.
1.50	Quod super est, vacuas auris animumque sagacem semotum a curis adhibe veram ad rationem, ne mea dona tibi studio disposta fideli, intellecta prius quam sint, contempta relinquas.	For the rest, give empty ears and a keen mind, set apart from cares, to true reasoning, so that you do not scorn and cast aside my gifts,

2 Gaius Memmius, a Roman politician (praetor 58 BC), to whom the poem is addressed.

LATIN	ENGLISH
nam tibi de summa caeli ratione deumque disserere incipiam et rerum primordia pandam, unde omnis natura creet res, auctet alatque, quove eadem rursum natura perempta resolvat, quae nos materiem et genitalia corpora rebus reddunda in ratione vocare et semina rerum appellare suemus et haec eadem usurpare corpora prima, quod ex illis sunt omnia primis.	laid out for you with faithful care, before you have understood them. For I shall set out for you the highest workings of heaven and the gods, and reveal the first beginnings of things, from which nature creates all things, makes them grow and feeds them, and into which, once they perish, nature dissolves them again. In setting out our account we are accustomed to call these matter and creative bodies of things, and to name them seeds of things, and to refer to these same things as first bodies, because from them, as first, all things exist.[3]

EPICURUS AGAINST RELIGION

A man of Greece first dared to defy religion and, by reasoning, explored the whole universe.

LATIN	ENGLISH
1.62 Humana ante oculos foede cum vita iaceret in terris oppressa gravi sub religione, quae caput a caeli regionibus ostendebat horribili super aspectu mortalibus instans, primum Graius homo mortalis tollere contra est oculos ausus primusque obsistere contra; quem neque fama deum nec fulmina nec minitanti murmure compressit caelum, sed eo magis acrem inritat animi virtutem, effringere ut arta naturae primus portarum claustra cupiret. ergo vivida vis animi pervicit et extra processit longe flammantia moenia mundi atque omne immensum peragravit mente animoque, unde refert nobis victor quid possit oriri, quid nequeat, finita potestas denique cuique qua nam sit ratione atque alte terminus haerens.	When human life lay foully before our eyes on the ground, crushed beneath the heavy weight of religion, which showed its head from the regions of the sky, looming over mortals with its horrible face, a man of Greece was the first who dared to lift his mortal eyes against it, and the first to stand against it. Neither stories of the gods nor thunderbolts nor the sky with its menacing rumble held him down, but they only spurred the more the keen courage of his mind, so that he longed to be the first to break the tight bolts of nature's gates. So the living force of his mind won through, and he went forth far beyond the flaming walls of the world, and traveled the whole immeasurable universe in thought and mind, and from there, victorious, brings back to us what can arise and what cannot—in short, by what principle each thing has its limited power and its deep-set boundary stone.[4]

3 Lucretius never uses the Greek word "atom"; his first beginnings, seeds and first bodies are Epicurus's atoms.

	LATIN	ENGLISH
	/ quare religio pedibus subiecta vicissim / opteritur, nos exaequat victoria caelo.	/ So religion in its turn is cast beneath our feet / and trampled; his victory makes us equal to heaven.

THE SACRIFICE OF IPHIGENIA

Religion, not philosophy, led the Greek leaders to kill a young girl at the altar.

	LATIN	ENGLISH
1.80	Illud in his rebus vereor, ne forte rearis impia te rationis inire elementa viamque indugredi sceleris. quod contra saepius illa religio peperit scelerosa atque impia facta. Aulide quo pacto Triviai virginis aram Iphianassai turparunt sanguine foede ductores Danaum delecti, prima virorum. cui simul infula virgineos circum data comptus ex utraque pari malarum parte profusast, et maestum simul ante aras adstare parentem sensit et hunc propter ferrum celare ministros aspectuque suo lacrimas effundere civis, muta metu terram genibus summissa petebat.	In this matter I fear one thing: that you may perhaps think you are entering on the elements of an impious reasoning and setting out on a road of crime. On the contrary, more often it is religion that has given birth to criminal and impious deeds. So it was at Aulis, when the altar of the virgin of the Crossroads was foully stained with the blood of Iphianassa by the chosen leaders of the Greeks, the foremost of men. As soon as the ribbon wound around her maiden hair fell in equal lengths down either cheek, and she saw her father standing sorrowful before the altar, and near him the attendants hiding the knife, and the people shedding tears at the sight of her, speechless with fear, she sank to her knees and reached for the ground.[5]
	/ nec miserae prodesse in tali tempore quibat, quod patrio princeps donarat nomine regem; nam sublata virum manibus tremibundaque ad aras deductast, non ut sollemni more sacrorum perfecto posset claro comitari Hymenaeo, sed casta inceste nubendi tempore in ipso hostia concideret mactatu maesta parentis, exitus ut classi felix faustusque daretur. tantum religio potuit suadere malorum.	/ Nor could it help the poor girl at such a moment that she had been the first to call the king by the name of father; for, raised by the hands of men, and trembling, to the altar she was led—not so that, when the solemn custom of the rites was complete, she might be escorted by the ringing wedding hymn, but so that, pure, she might impurely, at the very age of marriage, fall, a grieving victim, slaughtered by her father's stroke, so that the fleet might be granted a happy and fa-

4 The "man of Greece" is Epicurus (341–270 BC), never named here. For Lucretius, religion (religio) means fear-driven superstition and cult.

5 Iphianassa is Iphigenia, daughter of Agamemnon, sacrificed at Aulis to Artemis (Diana, "of the Crossroads") so that the Greek fleet could sail for Troy.

	LATIN	ENGLISH
		vorable sailing. So great the evils religion could prompt.
1.102	Tutemet a nobis iam quovis tempore vatum terriloquis victus dictis desciscere quaeres. quippe etenim quam multa tibi iam fingere possunt somnia, quae vitae rationes vertere possint fortunasque tuas omnis turbare timore! et merito; nam si certam finem esse viderent aerumnarum homines, aliqua ratione valerent religionibus atque minis obsistere vatum. nunc ratio nulla est restandi, nulla facultas, aeternas quoniam poenas in morte timendum.	You yourself, sooner or later, overcome by the terrifying words of the seers, will seek to fall away from us. Indeed, how many dreams they can invent for you even now, dreams that could overturn the course of your life and throw all your fortunes into confusion with fear! And with good reason; for if men saw that there was a fixed end to their troubles, they would have some means, some strength to stand against religion and the threats of the seers. As it is, there is no means of resisting, no power, since they must fear eternal punishment in death.
	/ ignoratur enim quae sit natura animai, nata sit an contra nascentibus insinuetur et simul intereat nobiscum morte dirempta an tenebras Orci visat vastasque lacunas an pecudes alias divinitus insinuet se, Ennius ut noster cecinit, qui primus amoeno detulit ex Helicone perenni fronde coronam, per gentis Italas hominum quae clara clueret; etsi praeterea tamen esse Acherusia templa Ennius aeternis exponit versibus edens, quo neque permaneant animae neque corpora nostra, sed quaedam simulacra modis pallentia miris; unde sibi exortam semper florentis Homeri commemorat speciem lacrimas effundere salsas coepisse et rerum naturam expandere dictis.	/ For no one knows what the nature of the spirit is, whether it is born, or on the contrary slips into us at birth, and whether it perishes together with us, torn apart by death, or goes to see the darkness of Orcus and its vast pools, or by divine power slips into other beasts, as our Ennius sang, who first brought down from lovely Helicon a crown of evergreen leaves, to win bright fame among the peoples of Italy; although, besides, that there are precincts of Acheron Ennius sets forth, proclaiming it in his undying verses, where neither our spirits nor our bodies remain, but certain images, strangely pale; and from there, he tells us, the shade of ever-flourishing Homer rose up before him and began to shed salt tears and to unfold the nature of things in words.[6]
	/ qua propter bene cum superis de rebus habenda nobis est ratio, solis lunaeque meatus qua fiant ratione, et qua vi quaeque gerantur in terris, tunc cum primis ratione sagaci unde anima atque animi constet natura videndum, et quae res nobis vigilantibus obvia mentes	/ Therefore we must give a good account of things above, of how the courses of the sun and moon come about, and by what force each thing happens on earth; but above all, with keen reasoning,

6 Ennius (239–169 BC), father of Latin epic, told in his Annals how Homer's ghost appeared to him. Helicon is the Muses' mountain; Orcus and Acheron are names for the underworld.

	LATIN	ENGLISH
	terrificet morbo adfectis somnoque sepultis, cernere uti videamur eos audireque coram, morte obita quorum tellus amplectitur ossa.	we must see what the spirit and the nature of the mind are made of, and what it is that confronts us waking and terrifies our minds when we are stricken by illness, or buried in sleep, so that we seem to see and hear face to face those whose bones, now that death has come, the earth embraces.[7]
1.136	Nec me animi fallit Graiorum obscura reperta difficile inlustrare Latinis versibus esse, multa novis verbis praesertim cum sit agendum propter egestatem linguae et rerum novitatem; sed tua me virtus tamen et sperata voluptas suavis amicitiae quemvis efferre laborem suadet et inducit noctes vigilare serenas quaerentem dictis quibus et quo carmine demum clara tuae possim praepandere lumina menti, res quibus occultas penitus convisere possis. hunc igitur terrorem animi tenebrasque necessest non radii solis neque lucida tela diei discutiant, sed naturae species ratioque.	Nor does it escape my mind that the dark discoveries of the Greeks are hard to illuminate in Latin verse, especially since much must be dealt with in new words because of the poverty of our language and the novelty of the subject; but still your worth and the pleasure I hope for from our sweet friendship persuade me to endure any labor and lead me to stay awake through the clear nights, searching for the words, the poem, by which at last I may hold out a bright light to your mind, by which you may see deep into hidden things. This terror of the mind, then, and this darkness must be dispelled not by the rays of the sun or the bright shafts of day, but by the face of nature and her reasoning.

NOTHING COMES FROM NOTHING

Nothing is made from nothing by divine power, and nothing is destroyed into nothing.

	LATIN	ENGLISH
1.149	Principium cuius hinc nobis exordia sumet, nullam rem e nihilo gigni divinitus umquam. quippe ita formido mortalis continet omnis, quod multa in terris fieri caeloque tuentur, quorum operum causas nulla ratione videre possunt ac fieri divino numine rentur. quas ob res ubi viderimus nil posse creari de nihilo, tum quod sequimur iam rectius inde perspiciemus, et unde queat res quaeque creari et quo quaeque modo fiant opera sine divom.	Our first principle will take its start from this: nothing is ever made from nothing by divine power. For fear holds all mortals in its grip because they see many things happen on earth and in the sky whose causes they can in no way see, and they suppose these things happen by divine will. Therefore, once we have seen that nothing can be created from nothing, we shall then see more clearly from there what we seek:

7 Lucretius's "mind" (animus) and "spirit" (anima) are the two parts of the soul; both, he will argue, are mortal.

	LATIN	ENGLISH
		both from what each thing can be created and how all things come about without the work of the gods.
1.159	Nam si de nihilo fierent, ex omnibus rebus omne genus nasci posset, nil semine egeret. e mare primum homines, e terra posset oriri squamigerum genus et volucres erumpere caelo; armenta atque aliae pecudes, genus omne ferarum, incerto partu culta ac deserta tenerent. nec fructus idem arboribus constare solerent, sed mutarentur, ferre omnes omnia possent. quippe ubi non essent genitalia corpora cuique, qui posset mater rebus consistere certa? at nunc seminibus quia certis quaeque creantur, inde enascitur atque oras in luminis exit, materies ubi inest cuiusque et corpora prima; atque hac re nequeunt ex omnibus omnia gigni, quod certis in rebus inest secreta facultas.	For if things came from nothing, then from all things every kind could be born; nothing would need seed. First, men could spring from the sea, and from the earth the scaly tribe, and birds could burst from the sky; cattle and other herds, every kind of wild beast, born at random, would occupy farmland and wilderness alike. Nor would the same fruit stay constant on trees, but would change: all trees could bear all fruit. For if there were no creative bodies for each thing, how could things have a fixed mother? But as it is, since each thing is created from fixed seeds, it is born and comes out into the shores of light from where the matter and first bodies of each thing are; and for this reason all things cannot be born from all things, because in particular things there is a distinct capacity.
1.174	Praeterea cur vere rosam, frumenta calore, vites autumno fundi suadente videmus, si non, certa suo quia tempore semina rerum cum confluxerunt, patefit quod cumque creatur, dum tempestates adsunt et vivida tellus tuto res teneras effert in luminis oras? quod si de nihilo fierent, subito exorerentur incerto spatio atque alienis partibus anni, quippe ubi nulla forent primordia, quae genitali concilio possent arceri tempore iniquo.	Besides, why do we see the rose put forth in spring, grain in the heat, vines at the urging of autumn, if not because, when the fixed seeds of things have flowed together in their own time, whatever is created comes into view while the seasons are right and the living earth safely brings its tender things out into the shores of light? But if they came from nothing, they would spring up suddenly at unfixed intervals and at alien times of year, since there would be no first beginnings that could be kept from creative union by an unfavorable season.
1.184	Nec porro augendis rebus spatio foret usus seminis ad coitum, si e nilo crescere possent; nam fierent iuvenes subito ex infantibus parvis e terraque exorta repente arbusta salirent. quorum nil fieri manifestum est, omnia quando paulatim crescunt, ut par est semine certo,	Nor again, for things to grow, would there be need of time for seed to come together, if they could grow from nothing; for little infants would suddenly become young men,

	LATIN	ENGLISH
	crescentesque genus servant; ut noscere possis quicque sua de materia grandescere alique.	and trees would leap up, suddenly risen from the earth. Plainly none of this happens, since all things grow little by little, as is right from fixed seed, and as they grow keep their kind; so you may recognize that each thing grows large and is nourished from its own matter.
1.192	Huc accedit uti sine certis imbribus anni laetificos nequeat fetus submittere tellus nec porro secreta cibo natura animantum propagare genus possit vitamque tueri; ut potius multis communia corpora rebus multa putes esse, ut verbis elementa videmus, quam sine principiis ullam rem existere posse.	Add to this that without fixed rains in the year the earth could not send up its gladdening produce, nor again could the nature of living things, cut off from food, propagate its kind and preserve life; so that you should rather think that many bodies are shared by many things, as we see letters shared by words, than that anything can exist without beginnings.[8]
1.199	Denique cur homines tantos natura parare non potuit, pedibus qui pontum per vada possent transire et magnos manibus divellere montis multaque vivendo vitalia vincere saecla, si non, materies quia rebus reddita certast gignundis, e qua constat quid possit oriri? nil igitur fieri de nilo posse fatendumst, semine quando opus est rebus, quo quaeque creatae aeris in teneras possint proferrier auras.	Then again, why could nature not produce men so huge that they could wade across the ocean on foot and tear great mountains apart with their hands and outlive many generations of living things, if not because a fixed matter has been assigned to things for their birth, from which it is settled what can arise? So we must admit that nothing can come from nothing, since things need seed, from which each, once created, can be brought forth into the soft breezes of the air.
1.208	Postremo quoniam incultis praestare videmus culta loca et manibus melioris reddere fetus, esse videlicet in terris primordia rerum quae nos fecundas vertentes vomere glebas terraique solum subigentes cimus ad ortus; quod si nulla forent, nostro sine quaeque labore sponte sua multo fieri meliora videres.	Lastly, since we see that cultivated land is better than untilled and returns better yield to the work of hands, there are evidently first beginnings of things in the earth which we, turning the fertile clods with the plowshare and working the soil of the earth, call forth to birth; but if there were none, you would see everything, without our labor, come into being far better of its own accord.

8 The Latin elementa means both “letters of the alphabet” and “elements”; Lucretius plays on the double sense throughout.

	LATIN	ENGLISH
1.215	Huc accedit uti quicque in sua corpora rursum dissoluat natura neque ad nihilum interemat res. nam siquid mortale e cunctis partibus esset, ex oculis res quaeque repente erepta periret; nulla vi foret usus enim, quae partibus eius discidium parere et nexus exsolvere posset. quod nunc, aeterno quia constant semine quaeque, donec vis obiit, quae res diverberet ictu aut intus penetret per inania dissoluatque, nullius exitium patitur natura videri.	Add to this that nature dissolves each thing back again into its own bodies and does not destroy things into nothing. For if anything were mortal in all its parts, each thing would be snatched suddenly from our eyes and perish; for there would be no need of any force that could cause its parts to break up and undo their bonds. But as it is, since each thing consists of eternal seed, until a force has met it that can shatter things with a blow or pierce within through the void spaces and dissolve them, nature does not allow the destruction of anything to be seen.
1.225	Praeterea quae cumque vetustate amovet aetas, si penitus peremit consumens materiem omnem, unde animale genus generatim in lumina vitae redducit Venus, aut redductum daedala tellus unde alit atque auget generatim pabula praebens? unde mare ingenuei fontes externaque longe flumina suppeditant? unde aether sidera pascit? omnia enim debet, mortali corpore quae sunt, infinita aetas consumpse ante acta diesque. quod si in eo spatio atque ante acta aetate fuere e quibus haec rerum consistit summa refecta, inmortali sunt natura praedita certe. haud igitur possunt ad nilum quaeque reverti.	Besides, whatever things time removes through age, if it destroys them utterly, using up all their matter, from where does Venus bring back the race of living things, kind by kind, into the light of life? Or, once brought back, from where does the inventive earth nourish and increase them, kind by kind, providing food? From where do native springs and rivers flowing from far away keep the sea supplied? From where does the ether feed the stars? For everything that is of mortal body must have been consumed by infinite time and the days gone by. But if in that span, in the age gone by, there have existed those things from which this sum of things is made and remade, they are surely endowed with an immortal nature. So no single thing can return to nothing.
1.238	Denique res omnis eadem vis causaque volgo conficeret, nisi materies aeterna teneret, inter se nexus minus aut magis indupedita; tactus enim leti satis esset causa profecto, quippe ubi nulla forent aeterno corpore, quorum contextum vis deberet dissolvere quaeque. at nunc, inter se quia nexus principiorum	Then again, the same force and cause would destroy all things alike, if eternal matter did not hold them together, bound more or less tightly in its interlocking; for mere touch would surely be cause enough of death, since there would be nothing of eternal body,

	LATIN	ENGLISH
	dissimiles constant aeternaque materies est, incolumi remanent res corpore, dum satis acris vis obeat pro textura cuiusque reperta. haud igitur redit ad nihilum res ulla, sed omnes discidio redeunt in corpora materiai. postremo pereunt imbres, ubi eos pater aether in gremium matris terrai praecipitavit; at nitidae surgunt fruges ramique virescunt arboribus, crescunt ipsae fetuque gravantur.	whose fabric each force would need to undo. But as it is, since the bonds of the beginnings with one another differ, and matter is eternal, things stay with their bodies intact until a force strong enough is found to meet them, matched to the texture of each. So nothing returns to nothing, but all things return, by breaking up, into the bodies of matter. Lastly, the rains perish when Father Sky has flung them down into the lap of Mother Earth; but shining crops spring up, and branches grow green on the trees; the trees themselves grow and are weighed down with fruit.
	/ hinc alitur porro nostrum genus atque ferarum, hinc laetas urbes pueris florere videmus frondiferasque novis avibus canere undique silvas, hinc fessae pecudes pinguis per pabula laeta corpora deponunt et candens lacteus umor uberibus manat distentis, hinc nova proles artubus infirmis teneras lasciva per herbas ludit lacte mero mentes perculsa novellas. haud igitur penitus pereunt quaecumque videntur, quando alit ex alio reficit natura nec ullam rem gigni patitur nisi morte adiuta aliena.	/ From this, in turn, our race and the race of beasts are fed; from this we see glad cities blossom with children, and leafy woods singing everywhere with new birds; from this the weary flocks, all through the glad pastures, lay down their fat bodies, and the white milky liquid flows from swollen udders; from this the newborn young, on unsteady legs, frisk and play in the soft grass, their young minds giddy with the pure milk. So none of the things that seem to perish perish utterly, since nature rebuilds one thing from another and allows nothing to be born unless helped by another's death.
1.265	Nunc age, res quoniam docui non posse creari de nihilo neque item genitas ad nil revocari, ne qua forte tamen coeptes diffidere dictis, quod nequeunt oculis rerum primordia cerni, accipe praeterea quae corpora tute necessest confiteare esse in rebus nec posse videri.	Now come, since I have taught that things cannot be created from nothing, nor, once born, be called back to nothing, in case you should nevertheless begin to distrust my words because the first beginnings of things cannot be seen with the eyes, hear besides of bodies which you yourself must admit exist in things and yet cannot be seen.
1.271	Principio venti vis verberat incita corpus ingentisque ruit navis et nubila differt, inter dum rapido percurrens turbine campos	First, the force of the wind, once roused, lashes the body and overwhelms huge ships and scatters the

	LATIN	ENGLISH
	arboribus magnis sternit montisque supremos silvifragis vexat flabris: ita perfurit acri cum fremitu saevitque minaci murmure pontus.	clouds; at times it runs across the plains in a swift whirlwind, strewing them with great trees, and harries the mountaintops with forest-breaking blasts: so wildly, with a shrill roar, the sea rages and storms with menacing rumble.
	/ sunt igitur venti ni mirum corpora caeca, quae mare, quae terras, quae denique nubila caeli verrunt ac subito vexantia turbine raptant, nec ratione fluunt alia stragemque propagant et cum mollis aquae fertur natura repente flumine abundanti, quam largis imbribus auget montibus ex altis magnus decursus aquai fragmina coniciens silvarum arbustaque tota, nec validi possunt pontes venientis aquai vim subitam tolerare: ita magno turbidus imbri molibus incurrit validis cum viribus amnis, dat sonitu magno stragem volvitque sub undis grandia saxa, ruit qua quidquid fluctibus obstat.	/ So winds, clearly, are unseen bodies that sweep the sea, the lands, and the clouds of the sky, harrying them and snatching them up in a sudden whirlwind; they flow and spread destruction in no other way than when the soft nature of water is carried along suddenly in a brimming flood, which, after heavy rains, a great rush of water down from the high mountains swells, hurling along broken pieces of forests and whole trees; and strong bridges cannot endure the oncoming water's sudden force: so, churned up by the heavy rain, the river runs against the piers with mighty strength, wreaks havoc with a great roar, and rolls under its waves huge rocks, rushing on wherever anything stands against its flood.
	/ sic igitur debent venti quoque flamina ferri, quae vel uti validum cum flumen procubuere quam libet in partem, trudunt res ante ruuntque impetibus crebris, inter dum vertice torto corripiunt rapidique rotanti turbine portant. quare etiam atque etiam sunt venti corpora caeca, quandoquidem factis et moribus aemula magnis amnibus inveniuntur, aperto corpore qui sunt.	/ So the blasts of wind too must move in the same way: when, like a mighty river, they have borne down in any direction, they push things before them and sweep them away with repeated onslaughts, and at times in a twisting eddy seize them and carry them off in a swift, spinning whirlwind. So, again and again, winds are unseen bodies, since in their deeds and ways they are found to rival great rivers, which have visible bodies.
1.298	Tum porro varios rerum sentimus odores nec tamen ad naris venientis cernimus umquam nec calidos aestus tuimur nec frigora quimus usurpare oculis nec voces cernere suemus; quae tamen omnia corporea constare necessest	Then again, we perceive the various smells of things, yet we never see them coming to our nostrils; nor do we see heat, nor can we take in cold

	LATIN	ENGLISH
	natura, quoniam sensus inpellere possunt; tangere enim et tangi, nisi corpus, nulla potest res.	with our eyes, nor do we usually see sounds; yet all these must consist of a bodily nature, since they can strike the senses; for nothing can touch or be touched except body.
1.305	Denique fluctifrago suspensae in litore vestis uvescunt, eaedem dispansae in sole serescunt. at neque quo pacto persederit umor aquai visumst nec rursum quo pacto fugerit aestu. in parvas igitur partis dispergitur umor, quas oculi nulla possunt ratione videre. quin etiam multis solis redeuntibus annis anulus in digito subter tenuatur habendo, stilicidi casus lapidem cavat, uncus aratri ferreus occulte decrescit vomer in arvis, strataque iam volgi pedibus detrita viarum saxea conspicimus; tum portas propter aena signa manus dextras ostendunt adtenuari saepe salutantum tactu praeterque meantum. haec igitur minui, cum sint detrita, videmus. sed quae corpora decedant in tempore quoque, invida praeclusit speciem natura videndi.	Then again, clothes hung up on a wave-breaking shore grow damp, and spread out in the sun they dry. Yet no one has seen how the water's moisture settled in them, nor again how it fled in the heat. So the moisture is dispersed into tiny parts which the eyes can in no way see. Moreover, as many years of sun come round, a ring on the finger is worn thin underneath by wearing, the fall of dripping water hollows the stone, the curved plow's iron share imperceptibly wears away in the fields, and we see the paved stones of the streets already worn by the feet of the crowd; then, by the gates, bronze statues show their right hands worn thin by the frequent touch of those who greet them and pass by. So we see these things diminish, since they have been worn down. But what bodies leave them at each moment, grudging nature has shut off from our sight.
1.322	Postremo quae cumque dies naturaque rebus paulatim tribuit moderatim crescere cogens, nulla potest oculorum acies contenta tueri, nec porro quae cumque aevo macieque senescunt, nec, mare quae impendent, vesco sale saxa peresa quid quoque amittant in tempore cernere possis. corporibus caecis igitur natura gerit res.	Lastly, whatever time and nature add to things little by little, forcing them to grow in due measure, no straining keenness of the eyes can see; nor, again, whatever grows old with age and wasting; nor, with rocks that overhang the sea, eaten by the gnawing salt, could you see what they lose at each moment. So nature does her work by unseen bodies.

THE VOID

Motion, seepage and differences in weight prove that there is empty space in things.

	LATIN	ENGLISH
1.329	Nec tamen undique corporea stipata tenentur omnia natura; namque est in rebus inane. quod tibi cognosse in multis erit utile rebus nec sinet errantem dubitare et quaerere semper de summa rerum et nostris diffidere dictis.	And yet all things are not held packed tight on every side by the nature of body; for there is void in things. To have learned this will be useful to you in many matters,

	LATIN	ENGLISH
	qua propter locus est intactus inane vacansque. quod si non esset, nulla ratione moveri res possent; namque officium quod corporis exstat, officere atque obstare, id in omni tempore adesset omnibus; haud igitur quicquam procedere posset, principium quoniam cedendi nulla daret res.	and will not let you wander in doubt and always be asking about the sum of things and distrusting my words. Therefore there is intangible place, void and empty. If there were not, things could in no way move; for what is the function of body, to obstruct and stand in the way, would be present at all times to all things; so nothing could advance, since nothing would make a beginning of giving way.
	/ at nunc per maria ac terras sublimaque caeli multa modis multis varia ratione moveri cernimus ante oculos, quae, si non esset inane, non tam sollicito motu privata carerent quam genita omnino nulla ratione fuissent, undique materies quoniam stipata quiesset.	/ But as it is, through seas and lands and the heights of heaven we see before our eyes many things moving in many ways, by varied means; and if there were no void, these things would not so much be robbed of restless motion as never have been born in any way at all, since matter would have lain still, packed tight on every side.
1.346	Praeterea quamvis solidae res esse putentur, hinc tamen esse licet raro cum corpore cernas. in saxis ac speluncis permanat aquarum liquidus umor et uberibus flent omnia guttis. dissipat in corpus sese cibus omne animantum; crescunt arbusta et fetus in tempore fundunt, quod cibus in totas usque ab radicibus imis per truncos ac per ramos diffunditur omnis. inter saepta meant voces et clausa domorum transvolitant, rigidum permanat frigus ad ossa. quod nisi inania sint, qua possent corpora quaeque transire, haud ulla fieri ratione videres.	Besides, however solid things may be thought to be, you can see from this that they have loose-textured body. In rocks and caves the liquid moisture of water seeps through, and everything weeps with abundant drops. Food spreads itself through the whole body of living things; trees grow and put forth fruit in their season because food is diffused through the whole of them, from the deepest roots up through the trunks and through all the branches. Sounds pass through walls and fly across the closed rooms of houses; numbing cold seeps through to the bones. If there were no voids through which the separate bodies could pass, you would see this happen in no way at all.
1.358	Denique cur alias aliis praestare videmus pondere res rebus nihilo maiore figura? nam si tantundemst in lanae glomere quantum corporis in plumbo est, tantundem pendere par est,	Then again, why do we see some things outweigh others though they are no larger in shape? For if there is as much body in a ball of wool

	LATIN	ENGLISH
	corporis officiumst quoniam premere omnia deorsum, contra autem natura manet sine pondere inanis. ergo quod magnumst aeque leviusque videtur, ni mirum plus esse sibi declarat inanis; at contra gravius plus in se corporis esse dedicat et multo vacui minus intus habere. est igitur ni mirum id quod ratione sagaci quaerimus, admixtum rebus, quod inane vocamus.	as in lead, they should weigh the same, since it is the function of body to press everything downward, while the nature of void, on the contrary, remains without weight. So what is equally large and yet seems lighter plainly declares that it has more void in it; but the heavier, on the other hand, shows that it has more body in it and far less empty space within. So there is, clearly, what we are seeking with keen reasoning, mixed in with things: what we call void.
1.370	Illud in his rebus ne te deducere vero possit, quod quidam fingunt, praecurrere cogor. cedere squamigeris latices nitentibus aiunt et liquidas aperire vias, quia post loca pisces linquant, quo possint cedentes confluere undae; sic alias quoque res inter se posse moveri et mutare locum, quamvis sint omnia plena. scilicet id falsa totum ratione receptumst. nam quo squamigeri poterunt procedere tandem, ni spatium dederint latices? concedere porro quo poterunt undae, cum pisces ire nequibunt? aut igitur motu privandumst corpora quaeque aut esse admixtum dicundumst rebus inane, unde initum primum capiat res quaeque movendi.	On this subject, so that it cannot lead you away from the truth, I am compelled to forestall a notion some people invent. They say that the waters give way to the scaly fish as they push forward and open liquid paths, because the fish leave spaces behind them into which the yielding waves can flow together; so too, they say, other things can move among one another and change their place, although everything is full. Clearly this whole idea has been accepted on false reasoning. For where, after all, will the scaly fish be able to advance unless the waters have given them room? And where, again, can the waves give way when the fish cannot move? So either we must deprive all bodies of motion, or we must say that void is mixed in with things, from which each thing takes its first start in moving.
1.384	Postremo duo de concursu corpora lata si cita dissiliant, nempe aer omne necessest, inter corpora quod fiat, possidat inane. is porro quamvis circum celerantibus auris confluat, haud poterit tamen uno tempore totum compleri spatium; nam primum quemque necessest occupet ille locum, deinde omnia possideantur. quod si forte aliquis, cum corpora dissiluere, tum putat id fieri quia se condenseat aer, errat; nam vacuum tum fit quod non fuit ante et repletur item vacuum quod constitit ante,	Lastly, if two broad bodies spring apart swiftly after colliding, then surely the air must take possession of all the void that comes to be between the bodies. And however quickly it flows in with rushing currents all around, it will still not be able to fill the whole space at one moment; for it must first occupy

	LATIN	ENGLISH
	nec tali ratione potest denserier aer nec, si iam posset, sine inani posset, opinor, ipse in se trahere et partis conducere in unum.	each place in turn, and only then will all be filled. But if perhaps someone thinks that, when the bodies spring apart, this happens because the air condenses itself, he is wrong; for then a void comes to be that was not there before, and likewise a void that existed before is filled; nor can air condense in such a way, nor, even if it could, could it, I think, without void draw itself into itself and gather its parts together.
1.398	Qua propter, quamvis causando multa moreris, esse in rebus inane tamen fateare necessest. multaque praeterea tibi possum commemorando argumenta fidem dictis conradere nostris. verum animo satis haec vestigia parva sagaci sunt, per quae possis cognoscere cetera tute. namque canes ut montivagae persaepe ferai naribus inveniunt intectas fronde quietes, cum semel institerunt vestigia certa viai, sic alid ex alio per te tute ipse videre talibus in rebus poteris caecasque latebras insinuare omnis et verum protrahere inde.	So, however long you delay by raising many objections, you must still admit that there is void in things. And besides, I could, by recounting many arguments, scrape together belief in my words. But for a keen mind these small traces are enough, by which you can come to know the rest by yourself. For just as hounds very often find by scent the leaf-covered lairs of a mountain-roaming beast, once they have picked up sure traces of its track, so you yourself will be able, on your own, to see one thing from another in matters like these, and to work your way into all the dark hiding places and drag out the truth from there.
	/ quod si pigraris paulumve recesseris ab re, hoc tibi de plano possum promittere, Memmi: usque adeo largos haustus e fontibus magnis lingua meo suavis diti de pectore fundet, ut verear ne tarda prius per membra senectus serpat et in nobis vitai claustra resolvat, quam tibi de quavis una re versibus omnis argumentorum sit copia missa per auris.	/ But if you are slow or turn away a little from the subject, this I can promise you plainly, Memmius: such generous draughts from great springs will my sweet tongue pour from my rich heart that I fear slow old age may first creep through my limbs and loosen the bolts of life in me before the whole wealth of arguments on any one point has been sent through your ears in my verses.
1.418	Sed nunc ut repetam coeptum pertexere dictis, omnis ut est igitur per se natura duabus constitit in rebus; nam corpora sunt et inane, haec in quo sita sunt et qua diversa moventur. corpus enim per se communis dedicat esse sensus; cui nisi prima fides fundata valebit, haut erit occultis de rebus quo referentes confirmare animi quicquam ratione queamus. tum porro locus ac spatium, quod inane vocamus, si nullum foret, haut usquam sita corpora possent esse neque omnino quoquam diversa meare;	But now, to return to weaving the web I began in words: all nature, then, as it is in itself, consists of two things; for there are bodies and there is void, in which they are placed and through which they move this way and that. For the sensation shared by all declares that body exists of itself; and unless trust in this is first firmly founded and stands, there will be nothing to appeal to on hidden things

	LATIN	ENGLISH
	id quod iam supera tibi paulo ostendimus ante. praeterea nihil est quod possis dicere ab omni corpore seiunctum secretumque esse ab inani, quod quasi tertia sit numero natura reperta.	so as to prove anything by the reasoning of the mind. Then again, if there were no place and space, which we call void, bodies could not be situated anywhere or move anywhere at all, this way or that; as I showed you a little earlier, above. Besides, there is nothing you can say is separate from all body and set apart from void, to be found as a third nature, as it were, in the count.
	/ nam quod cumque erit, esse aliquid debebit id ipsum augmine vel grandi vel parvo denique, dum sit; cui si tactus erit quamvis levis exiguusque, corporis augebit numerum summamque sequetur; sin intactile erit, nulla de parte quod ullam rem prohibere queat per se transire meantem, scilicet hoc id erit, vacuum quod inane vocamus.	/ For whatever will exist must itself be something, of large or small bulk, so long as it exists; if it has touch, however light and slight, it will increase the count of body and join its sum; but if it is intangible, unable at any point to keep anything passing through it from passing, then this, of course, will be the empty space we call void.
1.440	Praeterea per se quod cumque erit, aut faciet quid aut aliis fungi debebit agentibus ipsum aut erit ut possint in eo res esse gerique. at facere et fungi sine corpore nulla potest res nec praebere locum porro nisi inane vacansque. ergo praeter inane et corpora tertia per se nulla potest rerum in numero natura relinqui, nec quae sub sensus cadat ullo tempore nostros nec ratione animi quam quisquam possit apisci.	Besides, whatever exists of itself will either act or must itself be acted upon by other things acting, or it will be such that things can exist and happen in it. But nothing can act or be acted upon without body, nor, again, can anything provide place except void and empty space. So besides void and bodies, no third nature of itself can be left in the number of things, neither one that ever falls under our senses nor one that anyone could grasp by the reasoning of the mind.
1.449	Nam quae cumque cluent, aut his coniuncta duabus rebus ea invenies aut horum eventa videbis. coniunctum est id quod nusquam sine permitiali discidio potis est seiungi seque gregari, pondus uti saxis, calor ignis, liquor aquai, tactus corporibus cunctis, intactus inani. servitium contra paupertas divitiaeque, libertas bellum concordia cetera quorum adventu manet incolumis natura abituque, haec soliti sumus, ut par est, eventa vocare. tempus item per se non est, sed rebus ab ipsis consequitur sensus, transactum quid sit in aevo, tum quae res instet, quid porro deinde sequatur;	For whatever has a name, you will find it either a property joined to these two things, or you will see it is an event of them. A property is that which can never, without fatal breaking apart, be separated and set aside, as weight is to rocks, heat to fire, wetness to water, touch to all bodies, intangibility to void. Slavery, on the other hand, poverty and riches, freedom, war, concord, and other things whose coming and going leave nature unharmed, these we are accustomed, rightly, to call events. Time likewise does not exist of itself, but from things themselves

LATIN	ENGLISH
nec per se quemquam tempus sentire fatendumst semotum ab rerum motu placidaque quiete.	comes our sense of what has been done in the past, then of what is present, and of what will follow after; and we must admit that no one senses time of itself, apart from the motion of things and their calm rest.[9]
/ denique Tyndaridem raptam belloque subactas Troiiugenas gentis cum dicunt esse, videndumst ne forte haec per se cogant nos esse fateri, quando ea saecla hominum, quorum haec eventa fuerunt, inrevocabilis abstulerit iam praeterita aetas; namque aliud terris, aliud regionibus ipsis eventum dici poterit quod cumque erit actum.	/ Then again, when people say that the carrying off of Tyndareus' daughter and the conquest of the Trojan peoples in war "exist," we must take care that they do not perhaps force us to admit that these things exist of themselves, since those generations of men whose events these were irrevocable time gone by has already carried off; for whatever has been done can be called an event, in one case of the lands, in another of the regions themselves.[10]
/ denique materies si rerum nulla fuisset nec locus ac spatium, res in quo quaeque geruntur, numquam Tyndaridis forma conflatus amore ignis Alexandri Phrygio sub pectore gliscens clara accendisset saevi certamina belli nec clam durateus Troiianis Pergama partu inflammasset equos nocturno Graiiugenarum; perspicere ut possis res gestas funditus omnis non ita uti corpus per se constare neque esse nec ratione cluere eadem qua constet inane, sed magis ut merito possis eventa vocare corporis atque loci, res in quo quaeque gerantur.	/ Lastly, if there had been no matter for things and no place and space, in which each thing happens, never would the flame fanned by love for the beauty of Tyndareus' daughter, smoldering in the Phrygian breast of Alexander, have lit the famous contests of savage war, nor would the wooden horse, unknown to the Trojans, have set Pergama ablaze with its night-born brood of Greek-born men. So you can see that all deeds whatever, from the ground up, do not exist or have being by themselves, as body does, nor are they spoken of on the same account as void, but rather you may rightly call them events of body and of place, in which each thing happens.[11]

9 "Properties" (coniuncta) cannot be removed without destroying a thing; "events" (eventa) come and go and leave it intact.
10 Tyndareus' daughter is Helen, whose abduction by Paris led to the Trojan War.
11 Alexander is Paris, the Trojan (Phrygian) prince who carried off Helen. Pergama is the citadel of Troy.

SOLID, EVERLASTING FIRST BODIES

The first beginnings are solid, have least parts, and can never be broken or destroyed.

	LATIN	ENGLISH
1.483	Corpora sunt porro partim primordia rerum, partim concilio quae constant principiorum. sed quae sunt rerum primordia, nulla potest vis stinguere; nam solido vincunt ea corpore demum. etsi difficile esse videtur credere quicquam in rebus solido reperiri corpore posse. transit enim fulmen caeli per saepta domorum clamor ut ac voces, ferrum candescit in igni dissiliuntque fero ferventi saxa vapore; cum labefactatus rigor auri solvitur aestu, tum glacies aeris flamma devicta liquescit; permanat calor argentum penetraleque frigus, quando utrumque manu retinentes pocula rite sensimus infuso lympharum rore superne. usque adeo in rebus solidi nihil esse videtur.	Bodies, moreover, are partly first beginnings of things, partly those formed from a union of first beginnings. But the first beginnings of things no force can quench; for in the end they prevail by the solidity of their body. And yet it seems hard to believe that anything with a solid body can be found among things. For the lightning of the sky passes through the walls of houses, as shouting and voices do; iron glows white in fire, and rocks leap apart in fierce, seething heat; the rigid hardness of gold is shaken loose and melted by heat, and the ice of bronze, conquered by flame, turns liquid; heat seeps through silver, and so does piercing cold, since we have felt both, holding cups in our hands as custom is, when the dew of water was poured in from above. So true is it that nothing among things seems to be solid.
	/ sed quia vera tamen ratio naturaque rerum cogit, ades, paucis dum versibus expediamus esse ea quae solido atque aeterno corpore constent, semina quae rerum primordiaque esse docemus, unde omnis rerum nunc constet summa creata.	/ But since true reasoning and the nature of things compel us, stay with me, while in a few verses I set out that there are things made of solid and everlasting body, which we teach are the seeds of things and their first beginnings, from which the whole sum of things now created is made.
1.503	Principio quoniam duplex natura duarum dissimilis rerum longe constare repertast, corporis atque loci, res in quo quaeque geruntur, esse utramque sibi per se puramque necessest. nam qua cumque vacat spatium, quod inane vocamus, corpus ea non est; qua porro cumque tenet se corpus, ea vacuum nequaquam constat inane. sunt igitur solida ac sine inani corpora prima.	First, since we have found that there exists a two-fold nature of two things far unlike each other, body and place, in which each thing happens, each of them must exist by itself, for itself, and unmixed. For wherever there is empty space, which we call void, there body is not; and again, wherever body holds its ground, there is by no means empty

LATIN	ENGLISH
	void. The first bodies, then, are solid and without void.
Praeterea quoniam genitis in rebus inanest, materiem circum solidam constare necessest; nec res ulla potest vera ratione probari corpore inane suo celare atque intus habere, si non, quod cohibet, solidum constare relinquas. id porro nihil esse potest nisi materiai concilium, quod inane queat rerum cohibere. materies igitur, solido quae corpore constat, esse aeterna potest, cum cetera dissoluantur.	Besides, since there is void in things that have come to be, solid matter must stand around it; nor can any thing be shown by true reasoning to hide void in its body and hold it within, unless you allow that what encloses it is solid. And that can be nothing but a union of matter, able to enclose the void in things. Matter, therefore, which consists of solid body, can be everlasting, while all else is dissolved.
Tum porro si nil esset quod inane vocaret, omne foret solidum; nisi contra corpora certa essent quae loca complerent quae cumque tenerent omne quod est spatium, vacuum constaret inane. alternis igitur ni mirum corpus inani distinctum, quoniam nec plenum naviter extat nec porro vacuum; sunt ergo corpora certa, quae spatium pleno possint distinguere inane. haec neque dissolui plagis extrinsecus icta possunt nec porro penitus penetrata retexi nec ratione queunt alia temptata labare; id quod iam supra tibi paulo ostendimus ante. nam neque conlidi sine inani posse videtur quicquam nec frangi nec findi in bina secando nec capere umorem neque item manabile frigus nec penetralem ignem, quibus omnia conficiuntur.	Then again, if there were nothing that was empty, everything would be solid; if, on the other hand, there were not definite bodies to fill whatever places they occupied, all the space there is would stand as empty void. Clearly, then, body is marked off from void in alternation, since the whole is neither completely full nor again empty; there are, then, definite bodies, which can mark off empty space from full. These can neither be dissolved when struck by blows from outside, nor pierced deep within and unraveled, nor assailed in any other way and made to totter— as I showed you a little earlier. For it seems that nothing can be crushed without void, or broken, or split in two by cutting, or take in moisture, or seeping cold either, or piercing fire, by which all things are destroyed.
/ et quo quaeque magis cohibet res intus inane, tam magis his rebus penitus temptata labascit. ergo si solida ac sine inani corpora prima sunt ita uti docui, sint haec aeterna necessest.	/ And the more void each thing contains within, the more it totters when these assail it deep inside. So if the first bodies are solid and without void, as I have taught, they must be everlasting.
Praeterea nisi materies aeterna fuisset, antehac ad nihilum penitus res quaeque redissent de nihiloque renata forent quae cumque videmus. at quoniam supra docui nil posse creari de nihilo neque quod genitumst ad nil revocari, esse inmortali primordia corpore debent, dissolui quo quaeque supremo tempore possint, materies ut subpeditet rebus reparandis. sunt igitur solida primordia simplicitate nec ratione queunt alia servata per aevom ex infinito iam tempore res reparare. denique si nullam finem natura parasset	Besides, if matter had not been everlasting, all things would long ago have returned utterly to nothing, and whatever we see would have been reborn from nothing. But since I have taught above that nothing can be created from nothing, nor can what has been born be called back to nothing, the first beginnings must be of immortal body, into which all things can be dissolved at their last

	LATIN	ENGLISH
	frangendis rebus, iam corpora materiai usque redacta forent aevo frangente priore, ut nihil ex illis a certo tempore posset conceptum summum aetatis pervadere finem.	hour, so that there may be matter to supply the renewal of things. The first beginnings, then, are solid in their singleness, nor could they in any other way have been preserved through the ages to renew things from infinite time past. Lastly, if nature had set no limit to the breaking of things, the bodies of matter would by now have been so worn down by the breaking of past ages that nothing conceived from them after a fixed time could reach the full limit of its life.
	/ nam quidvis citius dissolvi posse videmus quam rursus refici; qua propter longa diei infinita aetas ante acti temporis omnis quod fregisset adhuc disturbans dissoluensque, numquam relicuo reparari tempore posset. at nunc ni mirum frangendi reddita finis certa manet, quoniam refici rem quamque videmus et finita simul generatim tempora rebus stare, quibus possint aevi contingere florem.	/ For we see that anything can be undone more quickly than made again; so whatever the long and endless age of all time gone by had broken up till now, disordering and dissolving, could never be repaired in the time remaining. But as it is, clearly, a fixed limit to breaking has been set and stands, since we see each thing renewed, and at the same time fixed periods established for things, kind by kind, in which they can reach the flower of their age.
1.565	Huc accedit uti, solidissima materiai corpora cum constant, possint tamen omnia reddi, mollia quae fiunt, aer aqua terra vapores, quo pacto fiant et qua vi quaeque gerantur, admixtum quoniam semel est in rebus inane. at contra si mollia sint primordia rerum, unde queant validi silices ferrumque creari, non poterit ratio reddi; nam funditus omnis principio fundamenti natura carebit. sunt igitur solida pollentia simplicitate, quorum condenso magis omnia conciliatu artari possunt validasque ostendere viris. porro si nullast frangendis reddita finis corporibus, tamen ex aeterno tempore quaeque nunc etiam superare necessest corpora rebus, quae non dum clueant ullo temptata periclo.	Add to this that, though the bodies of matter are utterly solid, we can still give an account of all the things that become soft—air, water, earth, heat— of how they come to be and by what force each works, since void is once and for all mixed in with things. But if, on the other hand, the first beginnings of things were soft, there will be no accounting for how hard flints and iron can be created; for all nature will lack from the start a foundation to begin from. They are strong, then, in solid singleness, and by their denser union all things can be packed close and show great strength. Again, even if no limit had been set to the breaking of bodies, still, from everlasting time, some bodies must survive even now in things,

	LATIN	ENGLISH
		ones that have not yet been assailed by any danger.
	/ at quoniam fragili natura praedita constant, discrepat aeternum tempus potuisse manere innumerabilibus plagis vexata per aevom.	/ But since they are endowed with a fragile nature, it does not square that they could have lasted through everlasting time, battered by countless blows through the ages.
1.584	Denique iam quoniam generatim reddita finis crescendi rebus constat vitamque tenendi, et quid quaeque queant per foedera naturai, quid porro nequeant, sancitum quando quidem extat, nec commutatur quicquam, quin omnia constant usque adeo, variae volucres ut in ordine cunctae ostendant maculas generalis corpore inesse, inmutabilis materiae quoque corpus habere debent ni mirum; nam si primordia rerum commutari aliqua possent ratione revicta, incertum quoque iam constet quid possit oriri, quid nequeat, finita potestas denique cuique qua nam sit ratione atque alte terminus haerens, nec totiens possent generatim saecla referre naturam mores victum motusque parentum.	Lastly, since a limit has been set for things, kind by kind, to their growth and their hold on life, and since what each can do under the laws of nature, and what it cannot, stands decreed, and nothing changes, but all things hold so constant that the many-colored birds, one generation after another, all show the markings of their kind upon their bodies, they must, clearly, have a body of unchanging matter too; for if the first beginnings of things could be overcome in some way and changed, it would then be uncertain what can arise and what cannot—in short, by what principle each thing has its limited power and its deep-set boundary stone, nor could the generations, kind by kind, so often repeat the nature, habits, way of life and movements of their parents.[12]
1.599	Tum porro quoniam est extremum quodque cacumen corporis illius, quod nostri cernere sensus iam nequeunt, id ni mirum sine partibus extat et minima constat natura nec fuit umquam per se secretum neque post hac esse valebit, alterius quoniamst ipsum pars primaque et una, inde aliae atque aliae similes ex ordine partes agmine condenso naturam corporis explent; quae quoniam per se nequeunt constare, necessest haerere unde queant nulla ratione revelli. sunt igitur solida primordia simplicitate, quae minimis stipata cohaerent partibus arte. non ex illorum conventu conciliata, sed magis aeterna pollentia simplicitate, unde neque avelli quicquam neque deminui iam concedit natura reservans semina rebus.	Then again, since there is in each case an extreme point of that body which our senses can no longer make out, that point, clearly, exists without parts and is of the smallest nature; it never was separate by itself, nor will it ever be able to be hereafter, since it is itself a part of something else, the first and single part; then other and other similar parts in order fill out, in close-packed ranks, the nature of the body; and since these cannot exist by themselves, they must cling to that from which they can in no way be

12 "The laws of nature" is literally "nature's treaties": the fixed terms governing what each thing can and cannot do.

	LATIN	ENGLISH
		torn. The first beginnings, then, are solid in their singleness, packed close, cohering tightly with their least parts, not put together by a meeting of those parts, but rather strong in everlasting singleness; from them nature allows nothing to be torn away or diminished, keeping them safe as seeds for things.
1.615	Praeterea nisi erit minimum, parvissima quaeque corpora constabunt ex partibus infinitis, quippe ubi dimidiae partis pars semper habebit dimidiam partem nec res praefiniet ulla. ergo rerum inter summam minimamque quod escit, nil erit ut distet; nam quamvis funditus omnis summa sit infinita, tamen, parvissima quae sunt, ex infinitis constabunt partibus aeque. quod quoniam ratio reclamat vera negatque credere posse animum, victus fateare necessest esse ea quae nullis iam praedita partibus extent et minima constent natura. quae quoniam sunt, illa quoque esse tibi solida atque aeterna fatendum.	Besides, unless there is a least, the tiniest bodies will each consist of infinite parts, since the half of a half will always have its own half, and nothing will set a limit. So what will there be to distinguish the sum of things from the least? Nothing; for however utterly infinite the whole sum is, still the tiniest things will consist of infinite parts just the same. Since true reasoning protests against this and denies that the mind can believe it, you must be won over and admit that there exist things endowed with no parts at all, of the smallest nature. And since these exist, you must admit that those too are solid and everlasting.
1.628	Denique si minimas in partis cuncta resolvi cogere consuesset rerum natura creatrix, iam nihil ex illis eadem reparare valeret propterea quia, quae nullis sunt partibus aucta, non possunt ea quae debet genitalis habere materies, varios conexus pondera plagas concursus motus, per quas res quaeque geruntur.	Lastly, if nature, creator of things, had made a habit of forcing all things to be broken down into least parts, she could no longer renew anything from them, because things that are enriched with no parts cannot have what creative matter must have—varied connections, weights, blows, collisions, motions, by which each thing happens.

AGAINST THE EARLIER PHILOSOPHERS

Heraclitus, Empedocles and Anaxagoras are refuted: fire, four elements or like parts cannot explain the world.

	LATIN	ENGLISH
1.635	Quapropter qui materiem rerum esse putarunt ignem atque ex igni summam consistere solo, magno opere a vera lapsi ratione videntur. Heraclitus init quorum dux proelia primus, clarus ⟨ob⟩ obscuram linguam magis inter inanis quamde gravis inter Graios, qui vera requirunt;	Therefore those who have thought that the matter of things is fire, and that the sum of things consists of fire alone, seem to have strayed far from true reasoning. Heraclitus leads them into battle, first of all,

	LATIN	ENGLISH
	omnia enim stolidi magis admirantur amantque, inversis quae sub verbis latitantia cernunt, veraque constituunt quae belle tangere possunt auris et lepido quae sunt fucata sonore.	famous for his dark speech—among the empty-headed, rather than among the serious Greeks who seek the truth; for fools admire and love all the more what they see lurking under twisted words, and set down as true whatever can prettily tickle the ears and is painted with a charming sound.[13]
1.645	Nam cur tam variae res possent esse, requiro, ex uno si sunt igni puroque creatae? nil prodesset enim calidum denserier ignem nec rare fieri, si partes ignis eandem naturam quam totus habet super ignis haberent. acrior ardor enim conductis partibus esset, languidior porro disiectis ⟨dis⟩que supatis. amplius hoc fieri nihil est quod posse rearis talibus in causis, ne dum variantia rerum tanta queat densis rarisque ex ignibus esse.	For how, I ask, could things be so varied if they were created from fire alone, pure fire? It would be no use for hot fire to be packed dense or made rare, if the parts of fire had the same nature that fire as a whole has too. The heat would be fiercer when the parts were drawn together, fainter when they were scattered and dispersed. Beyond this there is nothing you could think could happen in such conditions—much less could all the great variety of things come from fires dense and rare.
1.655	Id quoque: si faciant admixtum rebus inane, denseri poterunt ignes rarique relinqui; sed quia multa sibi cernunt contraria quae sint et fugitant in rebus inane relinquere purum, ardua dum metuunt, amittunt vera viai nec rursum cernunt exempto rebus inane omnia denseri fierique ex omnibus unum corpus, nil ab se quod possit mittere raptim, aestifer ignis uti lumen iacit atque vaporem, ut videas non e stipatis partibus esse.	This too: if they were to allow void mixed in with things, fires could be packed dense or left rare; but since they see many things that would contradict them, and shrink from leaving pure void in things, fearing the steep path, they lose the true road; nor do they see, on the other hand, that if void is taken from things, all would be packed dense, and from all things one body would be made, which could send out nothing swiftly from itself, as heat-bearing fire throws out light and warmth, so that you can see it is not made of close-packed parts.
1.665	Quod si forte alia credunt ratione potesse ignis in coetu stingui mutareque corpus, scilicet ex nulla facere id si parte reparcent, occidet ad nihilum ni mirum funditus ardor omnis et ⟨e⟩ nihilo fient quae cumque creantur; nam quod cumque suis mutatum finibus exit, continuo hoc mors est illius quod fuit ante. proinde aliquid superare necesse est incolume ollis, ne tibi res redeant ad nilum funditus omnes de nihiloque renata vigescat copia rerum.	But if perhaps they believe that in some other way fires can be quenched in their union and change their substance, then surely, if they allow this with no part held back, all heat, clearly, will perish utterly into nothing, and whatever is created will come from nothing; for whatever changes and passes out of its own bounds, that is at once the death of what it was before.

13 Heraclitus of Ephesus (c. 500 BC), nicknamed “the Obscure”, held that fire is the basic stuff of the world.

	LATIN	ENGLISH
		So something must survive in them unharmed, or else all things would return utterly to nothing for you, and the store of things would be reborn from nothing and flourish.
1.675	Nunc igitur quoniam certissima corpora quaedam sunt, quae conservant naturam semper eandem, quorum abitu aut aditu mutatoque ordine mutant naturam res et convertunt corpora sese, scire licet non esse haec ignea corpora rerum. nil referret enim quaedam decedere, abire atque alia adtribui mutarique ordine quaedam, si tamen ardoris naturam cuncta tenerent; ignis enim foret omnimodis quod cumque crearet. verum, ut opinor, itast: sunt quaedam corpora, quorum concursus motus ordo positura figurae efficiunt ignis mutatoque ordine mutant naturam neque sunt igni simulata neque ulli praeterea rei quae corpora mittere possit sensibus et nostros adiectu tangere tactus.	Now then, since there are certain utterly fixed bodies which keep their nature always the same, by whose going or coming and change of order things change their nature and bodies are transformed, you may know that these bodies of things are not made of fire. For it would make no difference that some depart and go away and others are added and some change their order, if all still kept the nature of heat; for whatever they created would be fire in every way. But, as I think, this is how it is: there are certain bodies whose collisions, motions, order, position, shapes produce fires, and when their order is changed they change their nature; and they are not like fire, nor like any other thing that can send off bodies to our senses and touch our touch by striking it.
	/ dicere porro ignem res omnis esse neque ullam rem veram in numero rerum constare nisi ignem, quod facit hic idem, perdelirum esse videtur. nam contra sensus ab sensibus ipse repugnat et labefactat eos, unde omnia credita pendent, unde hic cognitus est ipsi quem nominat ignem; credit enim sensus ignem cognoscere vere, cetera non credit, quae nilo clara minus sunt. quod mihi cum vanum tum delirum esse videtur; quo referemus enim? quid nobis certius ipsis sensibus esse potest, qui vera ac falsa notemus?	/ Moreover, to say that all things are fire, and that no real thing exists in the number of things except fire, as this same man does, seems the height of madness. For he himself, from the senses, fights against the senses and undermines them, on which all belief hangs, from which he came to know this thing he calls fire; for he believes the senses truly know fire, but not the rest, which are no less clear. This seems to me both empty and mad; for to what shall we appeal? What can be more certain for us than the senses themselves, to mark off true from false?
1.701	Praeterea quare quisquam magis omnia tollat et velit ardoris naturam linquere solam,	Besides, why should anyone rather do away with all things

	LATIN	ENGLISH
	quam neget esse ignis, ⟨aliam⟩ tamen esse relinquat? aequa videtur enim dementia dicere utrumque.	and wish to leave only the nature of heat, than deny that fire exists and yet let some other nature exist? For it seems equal madness to say either.
1.705	Quapropter qui materiem rerum esse putarunt ignem atque ex igni summam consistere posse, et qui principium gignundis aera rebus constituere aut umorem qui cumque putarunt fingere res ipsum per se terramve creare omnia et in rerum naturas vertier omnis, magno opere a vero longe derrasse videntur. adde etiam qui conduplicant primordia rerum aera iungentes igni terramque liquori, et qui quattuor ex rebus posse omnia rentur ex igni terra atque anima procrescere et imbri.	Therefore those who have thought that the matter of things is fire, and that the sum of things can consist of fire, and those who have set up air as the source for the birth of things, or whoever has thought that water by itself forms things, or that earth creates all things and turns into all the natures of things, seem to have wandered far, far from the truth. Add too those who double the first beginnings of things, joining air to fire and earth to water, and those who think all things can grow from four things—from fire, earth, breath, and rain.
	/ quorum Acragantinus cum primis Empedocles est, insula quem triquetris terrarum gessit in oris, quam fluitans circum magnis anfractibus aequor Ionium glaucis aspargit virus ab undis angustoque fretu rapidum mare dividit undis Aeoliae terrarum oras a finibus eius. hic est vasta Charybdis et hic Aetnaea minantur murmura flammarum rursum se colligere iras, faucibus eruptos iterum vis ut vomat ignis ad caelumque ferat flammai fulgura rursum. quae cum magna modis multis miranda videtur gentibus humanis regio visendaque fertur rebus opima bonis, multa munita virum vi, nil tamen hoc habuisse viro praeclarius in se nec sanctum magis et mirum carumque videtur.	/ Foremost among these is Empedocles of Acragas, whom the island bore within its three-cornered coasts, around which the Ionian sea, flowing in great windings, sprinkles salt spray from its gray-green waves, and the rushing sea in a narrow strait divides with its waves the shores of the Aeolian lands from the island's borders. Here is vast Charybdis, and here the rumblings of Etna threaten to gather again the wrath of their flames, so that its violence may once more vomit fires burst from its jaws and hurl again to the sky the lightning flashes of flame. And though this great region seems in many ways a marvel to the peoples of mankind and is said to be well worth seeing, rich in good things, strongly guarded by a wealth of men, yet it seems to have held nothing more glorious than this man, nothing more holy, more wonderful, or more dear.[14]

	LATIN	ENGLISH
	/ carmina quin etiam divini pectoris eius vociferantur et exponunt praeclara reperta, ut vix humana videatur stirpe creatus.	/ His verses, too, born of his godlike heart, cry out and set forth such glorious discoveries that he scarcely seems born of human stock.
1.734	Hic tamen et supra quos diximus inferiores partibus egregie multis multoque minores, quamquam multa bene ac divinitus invenientes ex adyto tam quam cordis responsa dedere sanctius et multo certa ratione magis quam Pythia quae tripodi a Phoebi lauroque profatur, principiis tamen in rerum fecere ruinas et graviter magni magno cecidere ibi casu.	Yet he, and those I spoke of above, far inferior in many ways and much lesser than he, though they discovered much that was good and divinely inspired, and gave responses, as it were, from the inner shrine of the heart, more holy and far more certain in reasoning than the Pythia pronounces from Phoebus' tripod and laurel, still, over the first beginnings of things, they came to ruin, and there, great as they were, they had a great and heavy fall.[15]
1.742	Primum quod motus exempto rebus inani constituunt et res mollis rarasque relinquunt aera solem ignem terras animalia frugis nec tamen admiscent in eorum corpus inane; deinde quod omnino finem non esse secandis corporibus facient neque pausam stare fragori nec prorsum in rebus minimum consistere qui⟨cquam⟩, 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 ⟨rerum⟩.	First, because they posit motion while taking void from things, and they leave things soft and rare— air, sun, fire, earth, animals, crops— yet do not mix void into their bodies; then, because they will have it that there is no limit at all to the cutting of bodies, no halt set to their breaking, and nothing at all that is least in things, though we see that the extreme point of each thing is what seems to our senses to be least, so that you may infer from this that in things you cannot see, the extreme point they have is the least.
1.753	Huc accedit item, quoniam primordia rerum mollia constituunt, quae nos nativa videmus esse et mortali cum corpore, funditus ut qui debeat ad nihilum iam rerum summa reverti de nihiloque renata vigescere copia rerum; quorum utrumque quid a vero iam distet habebis.	Add to this, too, that since they make the first beginnings of things soft—things we see are born and have mortal bodies—the sum of things would by now have had to return utterly to nothing, and the store of things be reborn from nothing and flourish; and you will know by now how far both of these are from the truth.
1.759	Deinde inimica modis multis sunt atque veneno ipsa sibi inter se; quare aut congressa peribunt	Then, these elements are in many ways hostile to one another, poison to each other; so either they will perish

14 Empedocles of Acragas in Sicily (5th century BC), poet and philosopher, held that all things come from four elements. Charybdis is the whirlpool in the strait between Sicily and Italy.
15 The Pythia was the priestess who delivered the oracles of Apollo (Phoebus) at Delphi.

	LATIN	ENGLISH
	aut ita diffugient, ut tempestate coacta fulmina diffugere atque imbris ventosque videmus.	when they meet, or they will scatter, just as, when a storm has gathered, we see lightning, rain, and wind scatter.
1.763	Denique quattuor ex rebus si cuncta creantur atque in eas rursum res omnia dissoluuntur, qui magis illa queunt rerum primordia dici quam contra res illorum retroque putari? alternis gignuntur enim mutantque colorem et totam inter se naturam tempore ab omni. [fulmina diffugere atque imbris ventosque videmus.] sin ita forte putas ignis terraeque coire corpus et aerias auras roremque liquoris, nil in concilio naturam ut mutet eorum, nulla tibi ex illis poterit res esse creata, non animans, non exanimo cum corpore, ut arbos; quippe suam quicque in coetu variantis acervi naturam ostendet mixtusque videbitur aer cum terra simul et quodam cum rore manere.	Lastly, if all things are created from four things and all things are dissolved back into them again, why should these be called the first beginnings of things any more than, the other way round, things be thought theirs? For they are born from each other in turn and change their color and their whole nature among themselves, from all time. [we see lightning, rain, and wind scatter.] But if perhaps you think that the body of fire and of earth and the airy breezes and the moisture of water come together in such a way that none changes its nature in the union, no thing can be created from them for you, no living thing, nor one with lifeless body, like a tree; for each, in the union of this motley heap, will show its own nature, and air will be seen to remain mixed together with earth and with moisture.[16]
	/ at primordia gignundis in rebus oportet naturam clandestinam caecamque adhibere, emineat ne quid, quod contra pugnet et obstet quo minus esse queat proprie quodcumque creatur.	/ But in the creation of things the first beginnings must bring to bear a nature hidden and unseen, so that nothing may stand out that would fight against and hinder whatever is created from being properly itself.
1.782	Quin etiam repetunt a caelo atque ignibus eius et primum faciunt ignem se vertere in auras aeris, hinc imbrem gigni terramque creari ex imbri retroque a terra cuncta reverti, umorem primum, post aera, deinde calorem, nec cessare haec inter se mutare, meare a caelo ad terram, de terra ad sidera mundi. quod facere haud ullo debent primordia pacto. immutabile enim quiddam superare necessest, ne res ad nihilum redigantur funditus omnes;	What is more, they begin from the sky and its fires, and make fire first turn into the breezes of air, from this rain be born, and earth be created from rain, and then all things return back from earth, first moisture, after that air, then heat, and these never cease to change into one another, to travel from sky to earth, from earth to the stars of the heavens.

16 Square brackets mark lines the editor judges not to belong where they stand; this one repeats 1.762.

LATIN	ENGLISH
nam quod cumque suis mutatum finibus exit, continuo hoc mors est illius quod fuit ante.	This the first beginnings must by no means do. For something unchangeable must survive, so that all things may not be reduced utterly to nothing; for whatever changes and passes out of its own bounds, that is at once the death of what it was before.
/ quapropter quoniam quae paulo diximus ante in commutatum veniunt, constare necessest ex aliis ea, quae nequeant convertier usquam, ne tibi res redeant ad nilum funditus omnis; quin potius tali natura praedita quaedam corpora constituas, ignem si forte crearint, posse eadem demptis paucis paucisque tributis, ordine mutato et motu, facere aeris auras, sic alias aliis rebus mutarier omnis?	/ Therefore, since the things we spoke of a little before undergo change, they must be made of other things that can never be transformed, or else all things would return utterly to nothing for you. Why not rather suppose that there are certain bodies endowed with such a nature that, if they have perhaps created fire, the same bodies, with a few taken away and a few added, and their order and motion changed, can make the breezes of air, and so all things change into one another?
/ 'At manifesta palam res indicat' inquis 'in auras aeris e terra res omnis crescere alique; et nisi tempestas indulget tempore fausto imbribus, ut tabe nimborum arbusta vacillent, solque sua pro parte fovet tribuitque calorem, crescere non possint fruges arbusta animantis.' scilicet et nisi nos cibus aridus et tener umor adiuvet, amisso iam corpore vita quoque omnis omnibus e nervis atque ossibus exsoluatur; adiutamur enim dubio procul atque alimur nos certis ab rebus, certis aliae atque aliae res. ni mirum quia multa modis communia multis multarum rerum in rebus primordia mixta sunt, ideo variis variae res rebus aluntur.	/ “But the plain facts show,” you say, “that all things grow up into the breezes of air from the earth and feed on them; and unless the season is kind in its favorable time with rains, so that the trees sway beneath the melting of the clouds, and the sun for its part warms them and gives its heat, crops, trees, and living things could not grow.” Of course—and unless dry food and soft moisture helped us, our body would waste away, and all life too would be loosed from all our sinews and bones; for beyond doubt we are helped and nourished by particular things, and other things by other particular things. Clearly, because many first beginnings, common in many ways to many things, are mixed in things, different things are nourished by different things.
/ atque eadem magni refert primordia saepe cum quibus et quali positura contineantur et quos inter se dent motus accipiantque; namque eadem caelum mare terras flumina solem constituunt, eadem fruges arbusta animantis, verum aliis alioque modo commixta moventur.	/ And with the same first beginnings it often matters greatly with what others and in what position they are held together, and what motions they give and receive among themselves;

	LATIN	ENGLISH
	quin etiam passim nostris in versibus ipsis multa elementa vides multis communia verbis, cum tamen inter se versus ac verba necessest confiteare et re et sonitu distare sonanti. tantum elementa queunt permutato ordine solo; at rerum quae sunt primordia, plura adhibere possunt unde queant variae res quaeque creari.	for the same ones make up sky, sea, lands, rivers, sun, the same make up crops, trees, living things, but they move mixed with different things and in different ways. Indeed, all through these very verses of mine you see many elements—letters—common to many words, and yet you must admit that verses and words differ from one another both in meaning and in their ringing sound. So much can letters do by a mere change of order; but the first beginnings of things can bring more means by which each of the various things can be created.
1.830	Nunc et Anaxagorae scrutemur homoeomerian quam Grai memorant nec nostra dicere lingua concedit nobis patrii sermonis egestas, sed tamen ipsam rem facilest exponere verbis. principio, rerum quam dicit homoeomerian, ossa videlicet e pauxillis atque minutis ossibus hic et de pauxillis atque minutis visceribus viscus gigni sanguenque creari sanguinis inter se multis coeuntibus guttis ex aurique putat micis consistere posse aurum et de terris terram concrescere parvis, ignibus ex ignis, umorem umoribus esse, cetera consimili fingit ratione putatque. nec tamen esse ulla de parte in rebus inane concedit neque corporibus finem esse secandis. quare in utraque mihi pariter ratione videtur errare atque illi, supra quos diximus ante.	Now let us also examine the homoeomeria ("likeness of parts") of Anaxagoras, as the Greeks call it, a word that the poverty of our native speech does not allow us to say in our own tongue; but still, the thing itself is easy to set out in words. First, as for what he calls the homoeomeria of things: bones, you see, from tiny, minute bones, and from tiny, minute bits of flesh, flesh is born, and blood created from many drops of blood coming together— so he thinks—and gold can form from specks of gold, and earth grow together from little earths, fires from fires, moisture from moistures; the rest he imagines and thinks on the same principle. And yet he does not allow that there is void anywhere in things, nor that there is a limit to the cutting of bodies. So on both counts he seems to me to go wrong just as those did whom we spoke of above.[17]
1.847	Adde quod inbecilla nimis primordia fingit; si primordia sunt, simili quae praedita constant natura atque ipsae res sunt aequeque laborant et pereunt, neque ab exitio res ulla refrenat. nam quid in oppressu valido durabit eorum, ut mortem effugiat, leti sub dentibus ipsis? ignis an umor an aura? quid horum? sanguen an ossa? nil ut opinor, ubi ex aequo res funditus omnis tam mortalis erit quam quae manifesta videmus	Add that he imagines his first beginnings far too feeble— if they are first beginnings, these things endowed with a nature like that of things themselves, which equally suffer and perish, with nothing to rein them back from destruction. For which of them will hold out under heavy pres-

17 Anaxagoras of Clazomenae (5th century BC) held that each substance is made of tiny particles like itself, and that everything contains portions of everything.

	LATIN	ENGLISH
	ex oculis nostris aliqua vi victa perire. at neque reccidere ad nihilum res posse neque autem crescere de nihilo testor res ante probatas.	sure, so as to escape death in the very teeth of destruction? Fire, or water, or air? Which of these? Blood, or bones? None, I think, since each thing will be utterly and equally as mortal as the things we plainly see vanish from our eyes, overcome by some force. But that things cannot fall back into nothing, nor again grow from nothing, I call to witness what I have already proved.
1.859	Praeterea quoniam cibus auget corpus alitque, scire licet nobis venas et sanguen et ossa ... sive cibos omnis commixto corpore dicent esse et habere in se nervorum corpora parva ossaque et omnino venas partisque cruoris, fiet uti cibus omnis et aridus et liquor ipse ex alienigenis rebus constare putetur, ossibus et nervis sanieque et sanguine mixto.	Besides, since food increases the body and nourishes it, we may know that veins and blood and bones ... Or if they say that all foods are of a mixed body and contain in them tiny bodies of sinews, and bones, and veins altogether, and parts of blood, it will follow that all food, both dry and liquid itself, must be thought to consist of things of other kinds, of bones and sinews and gore and blood mixed together.[18]
1.867	Praeterea quae cumque e terra corpora crescunt, si sunt in terris, terram constare necessest ex alienigenis, quae terris exoriuntur. transfer item, totidem verbis utare licebit: in lignis si flamma latet fumusque cinisque, ex alienigenis consistant ligna necessest, [praeterea tellus quae corpora cumque alit auget] ex alienigenis, quae lignis ⟨ex⟩oriuntur.	Besides, if all the bodies that grow from the earth are in the earth, the earth must consist of things of other kinds, which spring up from the earth. Carry this over too, and you may use just as many words: if flame lies hidden in logs, and smoke and ash, logs must consist of things of other kinds, [besides, whatever bodies the earth feeds and increases] of things of other kinds, which spring from logs.
1.875	Linquitur hic quaedam latitandi copia tenvis, id quod Anaxagoras sibi sumit, ut omnibus omnis res putet inmixtas rebus latitare, sed illud apparere unum, cuius sint plurima mixta et magis in promptu primaque in fronte locata. quod tamen a vera longe ratione repulsumst; conveniebat enim fruges quoque saepe, minaci	Here a slender loophole for hiding is left, which Anaxagoras seizes: he thinks that all things lie hidden, mixed in all things, but that only that one shows itself of which most is mixed in, placed more in view and in the front line. But this is driven far from true reasoning; for then crops too, when they are broken beneath

18 One or more lines are lost here.

LATIN	ENGLISH
robore cum in saxi franguntur, mittere signum sanguinis aut aliquid, nostro quae corpore aluntur.	the menacing strength of the millstone, ought often to give off some sign of blood, or of the things that are nourished in our body.
/ cum lapidi in lapidem terimus, manare cruorem consimili ratione herbis quoque saepe decebat, et latices dulcis guttas similique sapore mittere, lanigerae quali sunt ubere lactis, scilicet et glebis terrarum saepe friatis herbarum genera et fruges frondesque videri dispertita inter terram latitare minute, postremo in lignis cinerem fumumque videri, cum praefracta forent, ignisque latere minutos. quorum nil fieri quoniam manifesta docet res, scire licet non esse in rebus res ita mixtas, verum semina multimodis inmixta latere multarum rerum in rebus communia debent.	/ When we grind them stone on stone, blood ought, in the same way, often to ooze from grasses too, and the waters to give off sweet drops, of just such flavor as the milk in the udders of the woolly flock; and, of course, when clods of earth are crumbled, kinds of grasses, crops, and leaves ought often to be seen lurking in the earth, scattered in tiny bits; and lastly ash and smoke ought to be seen in logs when they are broken, and tiny fires hiding. Since the plain facts teach that none of this happens, we may know that things are not mixed in things in this way, but that seeds, common to many things, must lie hidden, mixed in things in many ways.
/ 'At saepe in magnis fit montibus' inquis 'ut altis arboribus vicina cacumina summa terantur inter se validis facere id cogentibus austris, donec flammai fulserunt flore coorto.' scilicet et non est lignis tamen insitus ignis, verum semina sunt ardoris multa, terendo quae cum confluxere, creant incendia silvis. quod si facta foret silvis abscondita flamma, non possent ullum tempus celarier ignes, conficerent volgo silvas, arbusta cremarent. iamne vides igitur, paulo quod diximus ante, permagni referre eadem primordia saepe cum quibus et quali positura contineantur et quos inter se dent motus accipiantque, atque eadem paulo inter se mutata creare ignes et lignum?	/ “But often on great mountains,” you say, “it happens that the neighboring tops of tall trees rub against each other when strong south winds force them to, until they blaze out as a flower of flame springs up.” Of course—and yet fire is not planted in the wood; rather there are many seeds of heat, and when by rubbing they have flowed together, they create fires in the forests. But if flame were already made and hidden in the forests, the fires could not be concealed for any length of time; they would destroy the forests everywhere and burn the trees. Do you now see, then, what I said a little before, that with the same first beginnings it often matters very greatly with what others and in what position they are held together, and what motions they give and receive among themselves, and that the same ones, a little changed among

	LATIN	ENGLISH
		themselves, create fires and wood?
	quo pacto verba quoque ipsa inter se paulo mutatis sunt elementis, cum ligna atque ignes distincta voce notemus.	Just as the words themselves are made of elements a little rearranged, when we name wood and fire with distinct sounds.[19]
1.915	Denique iam quae cumque in rebus cernis apertis si fieri non posse putas, quin materiai corpora consimili natura praedita fingas, hac ratione tibi pereunt primordia rerum: fiet uti risu tremulo concussa cachinnent et lacrimis salsis umectent ora genasque.	Lastly, if you think that whatever you see among visible things cannot come about unless you imagine that the bodies of matter are endowed with a like nature, on this reasoning the first beginnings of things are lost to you: it will follow that they shake with quivering laughter and guffaw, and wet their faces and cheeks with salty tears.

HONEY ON THE CUP

Lucretius explains why he sweetens hard philosophy with poetry, as doctors sweeten bitter medicine.

	LATIN	ENGLISH
1.921	Nunc age, quod super est, cognosce et clarius audi. nec me animi fallit quam sint obscura; sed acri percussit thyrso laudis spes magna meum cor et simul incussit suavem mi in pectus amorem Musarum, quo nunc instinctus mente vigenti avia Pieridum peragro loca nullius ante trita solo. iuvat integros accedere fontis atque haurire iuvatque novos decerpere flores insignemque meo capiti petere inde coronam, unde prius nulli velarint tempora Musae; primum quod magnis doceo de rebus et artis religionum animum nodis exsolvere pergo, deinde quod obscura de re tam lucida pango carmina musaeo contingens cuncta lepore.	Now come, learn what remains, and hear it more clearly. I am well aware how obscure these things are; but a great hope of praise has struck my heart with its sharp thyrsus and at the same time driven into my breast a sweet love of the Muses. Inspired by it now, with a vigorous mind, I roam the pathless haunts of the Pierides, trodden by no one's foot before. It is a joy to approach untouched springs and drink from them, a joy to pluck new flowers and seek for my head a splendid crown from places where the Muses have never before wreathed anyone's brow: first, because I teach of great things and press on to free the mind from the tight knots of religion; then, because on so dark a subject I compose such lucid verses, touching everything with the Muses' charm.[20]

19 In Latin, ligna ("wood") and ignes ("fires") differ by only a letter or two.
20 The thyrsus is the ivy-tipped wand carried by worshippers of Bacchus. The Pierides are the Muses, named after Pieria in northern Greece.

	LATIN	ENGLISH
	/ id quoque enim non ab nulla ratione videtur; sed vel uti pueris absinthia taetra medentes cum dare conantur, prius oras pocula circum contingunt mellis dulci flavoque liquore, ut puerorum aetas inprovida ludificetur labrorum tenus, interea perpotet amarum absinthi laticem deceptaque non capiatur, sed potius tali facto recreata valescat, sic ego nunc, quoniam haec ratio plerumque videtur tristior esse quibus non est tractata, retroque volgus abhorret ab hac, volui tibi suaviloquenti carmine Pierio rationem exponere nostram et quasi musaeo dulci contingere melle, si tibi forte animum tali ratione tenere versibus in nostris possem, dum perspicis omnem naturam rerum, qua constet compta figura.	/ For this too seems not to be without good reason. But just as doctors, when they try to give children foul wormwood, first touch the rims all around the cups with the sweet golden liquid of honey, so that the unsuspecting age of childhood may be fooled as far as the lips, and meanwhile drink down the bitter juice of wormwood, and be tricked but not harmed, but rather be restored by such means and grow well— so I now, since this account of things often seems rather grim to those who have not tried it, and the crowd shrinks back from it, have chosen to set out our reasoning for you in the sweet-voiced song of the Pierides and, as it were, to touch it with the Muses' sweet honey, in the hope that by such means I might hold your mind on my verses, while you come to see the whole nature of things, and the shape in which it is framed.

AN INFINITE UNIVERSE

Space and matter are unlimited, and there is no center toward which all things press.

	LATIN	ENGLISH
1.951	Sed quoniam docui solidissima materiai corpora perpetuo volitare invicta per aevom, nunc age, summai quaedam sit finis eorum nec⟨ne⟩ sit, evolvamus; item quod inane repertumst seu locus ac spatium, res in quo quaeque gerantur, pervideamus utrum finitum funditus omne constet an immensum pateat vasteque profundum.	But since I have taught that the utterly solid bodies of matter fly about unconquered through all eternity, now come, let us unfold whether there is some limit to their sum or not; and likewise what we have found to be void, or place and space, in which all things happen— let us look closely whether it is wholly bounded or stretches out immeasurable, vast and deep.
1.958	Omne quod est igitur nulla regione viarum finitumst; namque extremum debebat habere. extremum porro nullius posse videtur esse, nisi ultra sit quod finiat, ut videatur quo non longius haec sensus natura sequatur. nunc extra summam quoniam nihil esse fatendum, non habet extremum, caret ergo fine modoque.	All that exists, then, is bounded in no direction along any of its paths; for then it would have to have an edge. But it seems that nothing can have an edge unless there is something beyond to bound it, so that a point is seen past which the nature of our senses cannot follow

	LATIN	ENGLISH
	nec refert quibus adsistas regionibus eius; usque adeo, quem quisque locum possedit, in omnis tantundem partis infinitum omne relinquit.	it. Now since we must admit there is nothing outside the sum of things, it has no edge, and so it lacks limit and measure. Nor does it matter in which of its regions you stand; so true is it that, whatever place anyone takes up, the whole stretches away from him boundless, just as far, on every side.
1.968	Praeterea si iam finitum constituatur omne quod est spatium, si quis procurrat ad oras ultimus extremas iaciatque volatile telum, id validis utrum contortum viribus ire quo fuerit missum mavis longeque volare, an prohibere aliquid censes obstareque posse? alterutrum fatearis enim sumasque necessest. quorum utrumque tibi effugium praecludit et omne cogit ut exempta concedas fine patere. nam sive est aliquid quod probeat efficiatque quo minus quo missum est veniat finique locet se, sive foras fertur, non est a fine profectum. hoc pacto sequar atque, oras ubi cumque locaris extremas, quaeram: quid telo denique fiet? fiet uti nusquam possit consistere finis effugiumque fugae prolatet copia semper.	Besides, suppose for a moment that all existing space were bounded, and someone ran forward to its farthest edges, the very last man, and threw a flying spear: would you rather that, hurled with mighty strength, it go where it was sent and fly far off, or do you think that something can stop it and block its way? For you must admit and adopt one or the other. Yet each of them shuts off your escape and forces you to grant that the universe stretches out, free of any limit. For whether there is something that stops it and prevents it from reaching where it was aimed and lodging itself at its limit, or it is carried on beyond, it did not set out from the limit. In this way I will follow you, and wherever you set the farthest edges, I will ask: what then will become of the spear? It will turn out that no limit can stand anywhere, and that the room for flight will always prolong the escape.
1.984	Praeterea spatium summai totius omne undique si inclusum certis consisteret oris finitumque foret, iam copia materiai undique ponderibus solidis confluxet ad imum nec res ulla geri sub caeli tegmine posset nec foret omnino caelum neque lumina solis, quippe ubi materies omnis cumulata iaceret ex infinito iam tempore subsidendo. at nunc ni mirum requies data principiorum corporibus nullast, quia nil est funditus imum, quo quasi confluere et sedes ubi ponere possint. semper in adsiduo motu res quaeque geruntur	Besides, if all the space of the whole universe were shut in on every side by fixed borders and were bounded, then the store of matter would by now have flowed together from everywhere, by its solid weight, to the bottom, and nothing could happen beneath the canopy of the sky, nor would there be any sky at all, nor the light of the sun, since all matter would lie heaped up, having settled down through infinite time. But as it is, no rest, of course, is given to the bodies

	LATIN	ENGLISH
	partibus ⟨in⟩ cunctis, infernaque suppeditantur ex infinito cita corpora materiai.	of the first beginnings, because there is no bottom at all where they might, as it were, flow together and take up their seats. Always, in ceaseless motion, all things go on in every part, and from below, out of the infinite, swift bodies of matter are supplied.
1.998	Postremo ante oculos res rem finire videtur; aer dissaepit collis atque aera montes, terra mare et contra mare terras terminat omnis; omne quidem vero nihil est quod finiat extra. est igitur natura loci spatiumque profundi, quod neque clara suo percurrere fulmina cursu perpetuo possint aevi labentia tractu nec prorsum facere ut restet minus ire meando; usque adeo passim patet ingens copia rebus finibus exemptis in cunctas undique partis.	Lastly, before our eyes one thing is seen to bound another: air walls off the hills, and mountains the air; land bounds the sea, and sea in turn all lands; but the universe has nothing outside to bound it. There is, then, a nature of place, a space so deep that neither could bright thunderbolts run through it in their course, gliding on through the endless stretch of time, nor by traveling make the distance left to go any less at all; so vast is the room that lies open to things everywhere, free of limits, in every direction on every side.
1.1008	Ipsa modum porro sibi rerum summa parare ne possit, natura tenet, quae corpus inane et quod inane autem est finiri corpore cogit, ut sic alternis infinita omnia reddat, aut etiam alterutrum, nisi terminet alterum eorum, simplice natura pateat tamen inmoderatum, nec mare nec tellus neque caeli lucida templa nec mortale genus nec divum corpora sancta exiguum possent horai sistere tempus; nam dispulsa suo de coetu materiai copia ferretur magnum per inane soluta, sive adeo potius numquam concreta creasset ullam rem, quoniam cogi disiecta nequisset.	Moreover, nature keeps the sum of things itself from being able to set a limit for itself, for she forces body to be bounded by void, and what is void to be bounded by body, so that by this alternation she makes the whole infinite; or else, if one of the two did not bound the other, it would still stretch out, by its single nature, beyond measure— and neither sea nor land nor the shining temples of the sky nor the mortal race nor the sacred bodies of the gods could hold their ground for the brief space of an hour; for the store of matter, driven apart from its gathering, would be swept along, dissolved, through the great void— or rather it would never have come together and created anything at all, since, scattered, it could never have been forced together.
	/ nam certe neque consilio primordia rerum ordine se suo quaeque sagaci mente locarunt nec quos quaeque ⟨darent motus pepigere profecto⟩	/ For certainly the first beginnings of things did not by design place themselves each in its order with a shrewd

LATIN	ENGLISH
sed quia multa modis multis mutata per omne ex infinito vexantur percita plagis, omne genus motus et coetus experiundo tandem deveniunt in talis disposituras, qualibus haec rerum consistit summa creata, et multos etiam magnos servata per annos ut semel in motus coniectast convenientis, efficit ut largis avidum mare fluminis undis integrent amnes et solis terra vapore fota novet fetus summissaque gens animantum floreat et vivant labentis aetheris ignes. quod nullo facerent pacto, nisi materiai ex infinito suboriri copia posset, unde amissa solent reparare in tempore quaeque.	mind, nor, surely, did they bargain over what motions each should make; but because, many and shifting in many ways through the universe, they are harried from infinite time, stirred up by blows, by trying every kind of motion and gathering they come at last into such arrangements as those by which this sum of things has been created and stands; and, preserved through many great years once it has been cast into fitting motions, it brings it about that the rivers replenish the greedy sea with the generous waters of their streams, and the earth, warmed by the heat of the sun, renews its offspring, and the race of living things springs up and flourishes, and the fires of the gliding sky live on. This they could by no means do unless a store of matter could rise up out of the infinite, from which all things are wont to make good their losses in time.
/ nam vel uti privata cibo natura animantum diffluit amittens corpus, sic omnia debent dissolui simul ac defecit suppeditare materies aliqua ratione aversa viai. nec plagae possunt extrinsecus undique summam conservare omnem, quae cumque est conciliata. cudere enim crebro possunt partemque morari, dum veniant aliae ac suppleri summa queatur; inter dum resilire tamen coguntur et una principiis rerum spatium tempusque fugai largiri, ut possint a coetu libera ferri. quare etiam atque etiam suboriri multa necessest, et tamen ut plagae quoque possint suppetere ipsae, infinita opus est vis undique materiai.	/ For just as the nature of living things, deprived of food, wastes away, losing its substance, so all things must dissolve as soon as matter fails to be supplied, turned aside in some way from its path. Nor can blows from outside, from every side, preserve every sum of things that has been brought together. They can indeed strike often and hold back a part until others come and the sum can be made up; but at times they are forced to rebound, and at the same time to grant the first beginnings of things space and time for flight, so that they can be carried free from the gathering. Therefore, again and again, many must rise up anew; and yet, for the blows themselves to be in supply as well,

LATIN	ENGLISH
	there is need of an infinite store of matter on every side.
1.1052 Illud in his rebus longe fuge credere, Memmi, in medium summae quod dicunt omnia niti atque ideo mundi naturam stare sine ullis ictibus externis neque quoquam posse resolvi summa atque ima, quod in medium sint omnia nixa, ipsum si quicquam posse in se sistere credis, et quae pondera sunt sub terris omnia sursum nitier in terraque retro requiescere posta, ut per aquas quae nunc rerum simulacra videmus; et simili ratione animalia suppa vagari contendunt neque posse e terris in loca caeli reccidere inferiora magis quam corpora nostra sponte sua possint in caeli templa volare; illi cum videant solem, nos sidera noctis cernere et alternis nobiscum tempora caeli dividere et noctes parilis agitare diebus.	In these matters, Memmius, shun far the belief that all things, as they say, press toward the center of the whole, and that for this reason the nature of the world stands firm without any blows from outside, and top and bottom cannot break apart in any direction, because all things press toward the center— if you believe that anything can stand upon itself— and that the heavy things beneath the earth all press upward and rest on the earth upside down, like the images of things we now see in water; and in the same way they contend that living creatures roam about upside down, and cannot fall off the earth into the regions of sky below them any more than our bodies can of their own accord fly up into the temples of the sky; that when they see the sun, we are looking at the stars of night, and that they share the seasons of the sky with us by turns and spend nights equal to our days.
/ sed vanus stolidis haec ... amplexi quod habent perv ... nam medium nihil esse potest ... infinita; neque omnino, si iam ⟨medium sit⟩, possit ibi quicquam consistere ... quam quavis alia longe ratione ... omnis enim locus ac spatium, quod in⟨ane vocamus⟩, per medium, per non medium, concedere ⟨debet⟩ aeque ponderibus, motus qua cumque feruntur. nec quisquam locus est, quo corpora cum venerunt, ponderis amissa vi possint stare ⟨in⟩ inani; nec quod inane autem est ulli subsistere debet, quin, sua quod natura petit, concedere pergat. haud igitur possunt tali ratione teneri res in concilium medii cuppedine victae.	

	LATIN	ENGLISH
		/ But these things, to the foolish, an empty ... since they cling to what they have embraced, wrong ... For there can be no center ... infinite; nor at all, even if there were a center, could anything stand still there ... rather than in any other way far ... For all place and space, which we call void, must, through center and not-center alike, give way equally to weights, in whatever direction their motions carry them. Nor is there any place where bodies, when they arrive, can lose the force of their weight and stand still in the void; nor must anything that is void give support to anything, but it goes on giving way, as its nature seeks. Things cannot, then, be held in this way in union, overcome by a craving for the center.[21]
1.1083	Praeterea quoniam non omnia corpora fingunt in medium niti, sed terrarum atque liquoris umorem ponti magnasque e montibus undas, et quasi terreno quae corpore contineantur, at contra tenuis exponunt aeris auras et calidos simul a medio differrier ignis, atque ideo totum circum tremere aethera signis et solis flammam per caeli caerula pasci, quod calor a medio fugiens se ibi conligat omnis, nec prorsum arboribus summos frondescere ramos posse,	Besides, since they do not imagine that all bodies press toward the center, but those of earth and of liquid, the moisture of the sea and the great waters from the mountains, and whatever is held, as it were, in an earthy body, while on the other hand they declare that the thin breezes of air and hot fires alike are carried away from the center, and that for this reason the whole ether round about twinkles with stars and the sun's flame feeds through the blue of the sky, because all heat, fleeing the center, gathers there, and that the topmost branches of trees could not come into leaf at all,
	nisi a terris paulatim cuique cibatum	unless food came gradually from the earth to each of them ... ...

21 The manuscript is damaged here, and the ends of several lines are lost.

	LATIN	ENGLISH
	...	...
	ne volucri ritu flammarum moenia mundi diffugiant subito magnum per inane soluta et ne cetera consimili ratione sequantur neve ruant caeli tonitralia templa superne terraque se pedibus raptim subducat et omnis inter permixtas rerum caelique ruinas corpora solventes abeat per inane profundum, temporis ut puncto nihil extet reliquiarum desertum praeter spatium et primordia caeca.	... lest, in the manner of flying flames, the walls of the world should suddenly scatter, dissolved, through the great void, and lest all else should follow in like fashion, and the thundering temples of the sky rush down from above, and the earth swiftly withdraw from beneath our feet, and all of it, amid the mingled ruins of things and of sky, setting its bodies loose, pass away through the deep void, so that in a moment of time nothing would be left but deserted space and unseen first beginnings.[22]
	/ nam qua cumque prius de parti corpora desse constitues, haec rebus erit pars ianua leti, hac se turba foras dabit omnis materiai.	/ For from whatever part you decide that bodies are first lacking, that part will be the doorway of death for things; through it the whole throng of matter will rush outside.
1.1114	Haec sic pernosces parva perductus opella; namque alid ex alio clarescet nec tibi caeca nox iter eripiet, quin ultima naturai pervideas: ita res accendent lumina rebus.	These things you will come to know fully, led on with little effort; for one thing will grow clear from another, and blind night will not snatch away your path before you have seen through to the farthest reaches of nature: so will things kindle light for things.

22 Eight lines are lost here; the text resumes in mid-sentence.

Book II

The motion of atoms
The swerve and free will; atomic shapes; countless worlds, born and dying.

	LATIN	ENGLISH
2.1	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 suavest. suave etiam belli certamina magna tueri per campos instructa tua sine parte pericli; sed nihil dulcius est, bene quam munita tenere edita doctrina sapientum templa serena, despicere unde queas alios passimque videre errare atque viam palantis quaerere vitae, 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 degitur hoc aevi quod cumquest!	Pleasant it is, when winds whip up the waters of the great sea, to watch from land another's great distress; not because it is a sweet pleasure that anyone should suffer, but because it is pleasant to see what evils you yourself are free from. Pleasant, too, to watch great contests of war arrayed across the plains, with no share of danger for yourself. But nothing is sweeter than to hold the well-fortified, calm temples raised high by the teaching of the wise, from which you can look down on others and see them wandering everywhere, straying as they search for the path of life, competing in talent, contending over rank, striving night and day with surpassing effort to rise to the height of wealth and become masters of the world. O wretched minds of men! O blind hearts! In what darkness of life and in how great dangers this little span of time, whatever it is, is spent!
	nonne videre nihil aliud sibi naturam latrare, nisi ut qui corpore seiunctus dolor absit, mente fruatur iucundo sensu cura semota metuque? ergo corpoream ad naturam pauca videmus esse opus omnino: quae demant cumque dolorem, delicias quoque uti multas substernere possint gratius inter dum, neque natura ipsa requirit, si non aurea sunt iuvenum simulacra per aedes lampadas igniferas manibus retinentia dextris, lumina nocturnis epulis ut suppeditentur, nec domus argento fulget auroque renidet nec citharae reboant laqueata auirataque templa, cum tamen inter se prostrati in gramine molli propter aquae rivum sub ramis arboris altae	Do you not see that nature barks for nothing but this for herself: that pain be removed and absent from the body, and that the mind enjoy a pleasant feeling, set free from care and fear? So we see that for the body's nature few things are needed at all—such things as take away pain and can also spread out many delights, more welcome at times; nor does nature herself miss it if there are no golden images of youths about the house holding fire-bearing torches in their right hands to supply light for banquets at night,

LATIN	ENGLISH
non magnis opibus iucunde corpora curant, praesertim cum tempestas adridet et anni tempora conspergunt viridantis floribus herbas.	if the house does not gleam with silver and glitter with gold, and paneled, gilded ceilings do not echo to the lyre, when all the same, stretched out together on the soft grass beside a stream of water, beneath the branches of a tall tree, they pleasantly refresh their bodies at no great cost, especially when the weather smiles and the seasons of the year sprinkle the green grass with flowers.
/ nec calidae citius decedunt corpore febres, textilibus si in picturis ostroque rubenti iacteris, quam si in plebeia veste cubandum est. quapropter quoniam nihil nostro in corpore gazae proficiunt neque nobilitas nec gloria regni, quod super est, animo quoque nil prodesse putandum; si non forte tuas legiones per loca campi fervere cum videas belli simulacra cientis, subsidiis magnis et opum vi constabilitas, ornatas armis stlattas pariterque animatas, his tibi tum rebus timefactae religiones effugiunt animo pavidae mortisque timores tum vacuum pectus lincunt curaque solutum.	/ Nor do hot fevers leave the body any faster if you toss about on embroidered pictures and blushing purple than if you must lie in a common blanket. Therefore, since treasures do our body no good, nor noble birth, nor the glory of a kingdom, we must further conclude that they are of no use to the mind either— unless perhaps, when you see your legions swarming over the plain, staging a mock war, strengthened with great reserves and a mighty force of wealth, equipped with arms and all alike in spirit, then, because of these things, your religious fears take fright and flee from your mind, and the terrors of death then leave your heart empty and free of care.
/ 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 versantur neque fulgorem reverentur ab auro nec clarum vestis splendorem purpureai, quid dubitas quin omnis sit haec rationis potestas, omnis cum in tenebris praesertim vita laboret? nam vel uti pueri trepidant atque omnia caecis in tenebris metuunt, sic nos in luce timemus inter dum, nihilo quae sunt metuenda magis quam quae pueri in tenebris pavitant finguntque futura. hunc igitur terrorem animi tenebrasque necessest non radii solis neque lucida tela diei discutiant, sed naturae species ratioque.	/ But if we see that these things are laughable and a mockery, and that in truth men's fears and the cares that dog them fear neither the clash of arms nor cruel weapons, but boldly move among kings and the masters of the world, and are not awed by the glitter of gold nor by the bright splendor of purple robes, why do you doubt that all this power belongs to reason, above all since the whole of life struggles in darkness? For just as children tremble and fear everything in blind darkness, so we in the light are afraid at times of things no more to be feared than what children shudder at in the dark and imagine will come.

	LATIN	ENGLISH
		This terror of the mind, then, and this darkness must be dispelled not by the rays of the sun or the bright shafts of day, but by the face of nature and her reasoning.

ATOMS ALWAYS IN MOTION

The first beginnings never rest; motes dancing in a sunbeam give a picture of their motion.

	LATIN	ENGLISH
2.62	Nunc age, quo motu genitalia materiai corpora res varias gignant genitasque resolvant et qua vi facere id cogantur quaeque sit ollis reddita mobilitas magnum per inane meandi, 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, 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 semper, et inter se mortales mutua vivunt.	Now come, by what motion the creative bodies of matter beget the various things, and break up what they have begotten, and by what force they are compelled to do so, and what power of movement has been given them to travel through the great void, I will explain: be sure you give yourself to my words. For certainly matter does not cling together packed tight, since we see each thing grow less, and we see all things, as it were, flowing away over the long years, and age withdrawing them from our eyes, while yet the sum of things is seen to stay unharmed, because the bodies that leave each thing lessen what they depart from and endow with growth what they come to; they force the one to grow old, the other in turn to flourish, and they do not linger there. So the sum of things is renewed forever, and mortal creatures live by exchange with one another.
	/ augescunt aliae gentes, aliae minuuntur, inque brevi spatio mutantur saecla animantum et quasi cursores vitai lampada tradunt.	/ Some races increase, others diminish, and in a short space the generations of living things are changed, and like runners, they hand on the torch of life.[1]
2.80	Si cessare putas rerum primordia posse cessandoque novos rerum progignere motus, avius a vera longe ratione vagaris. nam quoniam per inane vagantur, cuncta necessest aut gravitate sua ferri primordia rerum aut ictu forte alterius. nam ⟨cum⟩ cita saepe	If you think the first beginnings of things can stand still and by standing still give birth to new motions of things, you wander far astray from true reasoning. For since they wander through the void, all the

1 An allusion to the Greek torch-race, in which a lit torch was passed from runner to runner.

	LATIN	ENGLISH
	obvia conflixere, fit ut diversa repente dissiliant; neque enim mirum, durissima quae sint ponderibus solidis neque quicquam a tergibus obstet. et quo iactari magis omnia materiai corpora pervideas, reminiscere totius imum nil esse in summa, neque habere ubi corpora prima consistant, quoniam spatium sine fine modoquest inmensumque patere in cunctas undique partis pluribus ostendi et certa ratione probatumst.	first beginnings of things must be carried along either by their own weight or perhaps by the blow of another. For when, speeding, they have often met and collided, it happens that they suddenly leap apart in different directions; and no wonder, since they are utterly hard, with solid weight, and nothing behind them stands in their way. And to see more clearly that all the bodies of matter are tossed about, remember that in the whole universe there is no bottom, and the first bodies have nowhere to come to rest, since space is without limit or measure and stretches out immeasurable in every direction on every side, as I have shown at length and proved by sure reasoning.
	/ quod quoniam constat, ni mirum nulla quies est 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 quae cumque magis condenso conciliatu exiguis intervallis convecta resultant, indupedita suis perplexis ipsa figuris, haec validas saxi radices et fera ferri corpora constituunt et cetera ⟨de⟩ genere horum. paucula quae porro magnum per inane vagantur, cetera 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 consociare etiam motus potuere recepta.	/ Since this is established, surely no rest is granted to the first bodies through the deep void; rather, driven on in ceaseless and varied motion, some, after colliding, rebound over great distances, while others are buffeted by the blow over short spaces. And those that, in a denser union, are driven together and rebound over tiny distances, entangled by their own interlocking shapes— these form the strong roots of rock and the fierce bodies of iron and the other things of their kind. Those few others that wander on through the great void leap far apart and spring back far and far again across great distances; these supply us with thin air and the shining light of the sun. And besides, many wander through the great void that have been thrown out of the unions of things and have nowhere been able to be taken in and join their motions with others.
2.112	Cuius, uti memoro, rei simulacrum et imago ante oculos semper nobis versatur et instat.	Of this, as I describe it, an image and likeness is always moving and present before our eyes.

	LATIN	ENGLISH
	contemplator enim, cum solis lumina cumque inserti fundunt radii per opaca domorum: multa minuta modis multis per inane videbis corpora misceri radiorum lumine in ipso et vel ut aeterno certamine proelia pugnas edere turmatim certantia nec dare pausam, conciliis et discidiis exercita crebris; conicere ut possis ex hoc, primordia rerum quale sit in magno iactari semper inani. dum taxat, rerum magnarum parva potest res exemplare dare et vestigia notitiai.	For look closely whenever the sun's rays are let in and pour their light through the darkened rooms of houses: you will see many tiny bodies in many ways through the void mingling in the very light of the rays, and, as if in everlasting conflict, waging wars and battles, fighting in troops and never pausing, driven on by frequent unions and separations; so that you can guess from this what it is for the first beginnings of things to be always tossed about in the great void. So far as it goes, a small thing can give a pattern of great things and traces of knowledge.
2.125	Hoc etiam magis haec animum te advertere par est corpora quae in solis radiis turbare videntur, quod tales turbae motus quoque materiai significant clandestinos caecosque subesse. multa videbis enim plagis ibi percita caecis commutare viam retroque repulsa reverti 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, ictibus illorum caecis inpulsa cientur, ipsaque ⟨pro⟩porro paulo maiora lacessunt.	All the more fitting is it that you turn your mind to these bodies that are seen tumbling in the sun's rays, because such tumbling also shows that there are motions of matter beneath, hidden and unseen. For there you will see many, struck by unseen blows, change their course and, driven back, return now here, now there, in every direction on every side. This wandering, you see, comes to all of them from the first beginnings. For first the first beginnings of things move of themselves; then those bodies that are formed in a small union and are, as it were, nearest to the powers of the first beginnings are set moving, driven by their unseen blows, and they in turn stir up bodies a little larger.
	/ sic a principiis ascendit motus et exit paulatim nostros ad sensus, ut moveantur illa quoque, in solis quae lumine cernere quimus nec quibus id faciant plagis apparet aperte.	/ So the motion rises up from the first beginnings and emerges little by little to our senses, so that those bodies also move that we can make out in the light of the sun, though by what blows they do so is not plainly apparent.
2.142	Nunc quae mobilitas sit reddita materiai corporibus, paucis licet hinc cognoscere, Memmi. primum aurora novo cum spargit lumine terras et variae volucres nemora avia pervolitantes aera per tenerum liquidis loca vocibus opplent,	Now what speed has been given to the bodies of matter you may learn from this in a few words, Memmius. First, when dawn sprinkles the lands with new

	LATIN	ENGLISH
	quam subito soleat sol ortus tempore tali convestire sua perfundens omnia luce, omnibus in promptu manifestumque esse videmus. at vapor is, quem sol mittit, lumenque serenum 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; qua propter simul inter se retrahuntur et extra officiuntur, uti cogantur tardius ire.	light, and various birds, flitting through the pathless woods, fill the places through the soft air with their liquid voices, how suddenly the sun, once risen at such a time, is wont to clothe everything, flooding it with its light, we see is plain and evident to all. But the heat the sun sends out, and its clear light, do not travel through empty void; so they are forced to go more slowly, while they beat their way, as it were, through waves of air; nor do the tiny particles of heat travel one by one, but entwined with one another and massed together; so they are at once held back by one another and hindered from outside, so that they are forced to go more slowly.
	/ 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, debent ni mirum 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, ut videant qua quicque geratur cum ratione.	/ But the first beginnings, which are of solid singleness, when they travel through empty void, and nothing outside holds them back, and they, being one whole of their own parts, are carried, straining, toward the one, the one place they set out for, must surely excel in speed and be carried far faster than the light of the sun, and run through many times the space in the same time that the sun's flashes spread across the sky. ... nor to follow each of the first beginnings one by one, so as to see by what means each thing is brought about.[2]
2.167	At quidam contra haec, ignari materiai, naturam non posse deum sine numine reddunt tanto opere humanis rationibus atmoderate tempora mutare annorum frugesque creare et iam cetera, mortalis quae suadet adire ipsaque deducit dux vitae dia voluptas et res per Veneris blanditur saecla propagent, ne genus occidat humanum. quorum omnia causa	But some, against this, ignorant of matter, maintain that nature, without the will of the gods, could not, so exactly suited to human purposes, change the seasons of the year and create crops and all the rest that divine pleasure, the guide of life, urges mortals to approach, and itself leads them

2 At least one line is lost here.

	LATIN	ENGLISH
	constituisse deos cum fingunt, omnibus rebus 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 naturam mundi: tanta stat praedita culpa. quae tibi posterius, Memmi, faciemus aperta; nunc id quod super est de motibus expediemus.	on, coaxing them to propagate their generations through the acts of Venus, so that the human race may not perish. When they imagine that the gods set up all things for their sake, in every respect they seem to have strayed far from true reasoning. For even if I did not know what the first begin- nings of things are, I would dare to affirm this from the very workings of the sky, and to show it from many other things: that the nature of the world was by no means cre- ated for us by divine power: it stands endowed with so great a flaw. These things, Memmius, I will make clear to you later; now I will set out what remains to be said about motions.
2.184	Nunc locus est, ut opinor, in his illud quoque rebus confirmare tibi, nullam rem posse sua vi corpoream sursum ferri sursumque meare. ne tibi dent in eo flammarum corpora frudem; sursus enim versus gignuntur et augmina sumunt et sursum nitidae fruges arbustaque crescunt, pondera, quantum in se est, cum deorsum cuncta ferantur. nec cum subsiliunt ignes ad tecta domorum et celeri flamma degustant tigna trabesque, sponte sua facere id sine vi subiecta putandum est. quod genus e nostro cum missus corpore sanguis emicat exultans alte spargitque cruorem. nonne vides etiam quanta vi tigna trabesque respuat umor aquae?	Now is the place, I think, in these matters to con- firm this too for you: that no bodily thing can by its own force be carried upward or travel upward. Do not let the bodies of flames deceive you in this; for they are born moving upward and take on growth upward, and upward grow the shining crops and trees, although all weights, so far as in them lies, are car- ried downward. Nor, when fires leap up to the roofs of houses and with swift flame taste the rafters and beams, must we think they do this of their own accord, without force from below. In the same way blood let out from our body spurts out, leaping high, and splashes gore. Do you not see, too, with what force the moisture of water spits out rafters and beams?
	nam quo magis ursimus altum derecta et magna vi multi pressimus aegre, tam cupide sursum removet magis atque remittit, plus ut parte foras emergant exiliantque. nec tamen haec, quantum est in se, dubitamus, opinor, quin vacuum per inane deorsum cuncta ferantur. sic igitur debent flammae quoque posse per auras aeris expressae sursum succedere, quamquam	For the more we push them down deep, straight down, and many of us press them with great force and effort, the more eagerly it thrusts them up and sends them back, so that they rise and leap out by more than half. And yet we do not doubt, I think, that all these things,

	LATIN	ENGLISH
	pondera, quantum in ⟨se⟩ est, deorsum ⟨de⟩ducere pugnent. nocturnasque faces caeli sublime volantis nonne vides longos flammarum ducere tractus in quas cumque dedit partis natura meatum? non cadere in terras stellas et sidera cernis? sol etiam ⟨caeli⟩ de vertice dissipat omnis ardorem in partis et lumine conserit arva; in terras igitur quoque solis vergitur ardor.	so far as in them lies, are carried downward through the empty void. In the same way, then, flames too must be able, squeezed out, to climb upward through the breezes of air, although their weights, so far as in them lies, struggle to draw them down. And the night torches of the sky, flying on high— do you not see them draw long trails of flame in whatever direction nature has given them a path? Do you not see stars and constellations fall to earth? The sun, too, from the summit of the sky scatters its heat in every direction and sows the fields with light; so the sun's heat, too, tends toward the earth.
	/ transversosque volare per imbris fulmina cernis, nunc hinc nunc illinc abrupti nubibus ignes concursant; cadit in terras vis flammea volgo.	/ You see thunderbolts flying crosswise through the rain; now from here, now from there, fires break from the clouds and clash together; the flaming force commonly falls to earth.

THE SWERVE

Falling atoms swerve slightly, which makes collisions possible and frees the will from fate.

	LATIN	ENGLISH
2.216	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. quod nisi declinare solerent, omnia deorsum imbris uti guttae caderent per inane profundum nec foret offensus natus nec plaga creata principiis; ita nihil umquam natura creasset.	In these matters we are eager for you to learn this too: that when bodies are carried straight down through the void by their own weights, at quite uncertain times and in uncertain places they push a little from their path, just so much that you could say their motion has changed. But if they were not in the habit of swerving, all would fall downward like drops of rain through the deep void, and no collision would have arisen, nor any blow been produced for the first beginnings; and so nature would never have created anything.
2.225	Quod si forte aliquis credit graviora potesse corpora, quo citius rectum per inane feruntur,	But if perhaps someone believes that heavier bodies,

LATIN	ENGLISH
incidere ex supero levioribus atque ita plagas gignere, quae possint genitalis reddere motus, avius a vera longe ratione recedit. nam per aquas quae cumque cadunt atque aera rarum, haec pro ponderibus casus celerare necessest propterea quia corpus aquae naturaque tenvis aeris haud possunt aeque rem quamque morari, sed citius cedunt gravioribus exsuperata; at contra nulli de nulla parte neque ullo tempore inane potest vacuum subsistere rei, quin, sua quod natura petit, concedere pergat; omnia qua propter debent per inane quietum aeque ponderibus non aequis concita ferri.	since they are carried faster straight through the void, could fall from above on lighter ones and so produce blows that could give rise to creative motions, he strays far off from true reasoning. For whatever falls through water and thin air must speed its fall in proportion to its weight, because the body of water and the thin nature of air cannot delay every thing equally, but give way sooner, overcome by heavier ones. But empty void, on the other hand, cannot give support to anything in any direction or at any time, but it goes on giving way, as its nature seeks; therefore all things must be carried through the still void at equal speed, though driven by unequal weights.
/ haud igitur poterunt levioribus incidere umquam ex supero graviora neque ictus gignere per se, qui varient 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. namque hoc in promptu manifestumque esse videmus, pondera, quantum in ⟨se⟩ est, non posse obliqua meare, ex supero cum praecipitant, quod cernere possis; sed nihil omnino ⟨recta⟩ regione viai declinare quis est qui possit cernere sese?	/ So heavier things will never be able to fall on lighter ones from above, nor of themselves produce blows that vary the motions by which nature carries on her work. Therefore, again and again, bodies must swerve a little—and no more than the least amount, lest we seem to invent oblique motions and the truth refute it. For this we see is plain and evident: that weights, so far as in them lies, cannot travel obliquely when they plunge from above, as far as you can see; but that nothing swerves at all from the straight line of its path—who is there who can see that?
2.251 Denique si semper motu conectitur omnis et vetere exoritur ⟨motus⟩ novus ordine certo nec declinando faciunt primordia motus principium quoddam, quod fati foedera rumpat, ex infinito ne causam causa sequatur, 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? nam dubio procul his rebus sua cuique voluntas principium dat et hinc motus per membra rigantur. nonne vides etiam patefactis tempore puncto	Lastly, if every motion is always linked to another, and a new one always arises from the old in fixed order, and the first beginnings do not, by swerving, make some beginning of motion to break the laws of fate, so that cause may not follow cause from infinite time, from where does this free will arise for living things throughout the earth, from where, I ask, comes this will wrested from the fates, by which we go forward wherever pleasure leads

LATIN	ENGLISH
carceribus non posse tamen prorumpere equorum vim cupidam tam de subito quam mens avet ipsa?	each of us, and likewise swerve our motions, not at a fixed time nor at a fixed place, but where the mind itself has carried us? For beyond doubt it is his own will that gives each one the beginning in these things, and from it motions flow through the limbs. Do you not see, too, that when the starting gates are thrown open in an instant, the eager strength of the horses cannot burst forth as suddenly as their mind itself desires?
/ omnis enim totum per corpus materiai 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, inde dari porro per totum corpus et artus. nec similest ut cum inpulsi procedimus ictu viribus alterius magnis magnoque coactu; nam tum materiem totius corporis omnem perspicuumst nobis invitis ire rapique, donec eam refrenavit per membra voluntas. iamne vides igitur, quamquam vis extera multos pellat et invitos cogat procedere saepe praecipitesque rapi, tamen esse in pectore nostro quiddam quod contra pugnare obstareque possit?	/ For the whole store of matter throughout the whole body must be roused, so that, roused through all the limbs, it may strain together and follow the mind's eagerness; so you can see that the beginning of motion is created by the heart, and proceeds first from the will of the mind, and from there is passed on through the whole body and limbs. Nor is it the same as when we move forward, pushed by a blow, by the great strength and great compulsion of another; for then it is plain that all the matter of the whole body moves and is swept along against our will, until the will has reined it in throughout the limbs. Do you not see, then, that although an outside force pushes many and often forces them to go forward against their will and be swept headlong, yet there is something in our breast that can fight against it and resist?
/ cuius ad arbitrium quoque copia materiai cogitur inter dum flecti per membra per artus et proiecta refrenatur retroque residit. quare in seminibus quoque idem fateare necessest, esse aliam praeter plagas et pondera causam motibus, unde haec est nobis innata potestas, de nihilo quoniam fieri nihil posse videmus. pondus enim prohibet ne plagis omnia fiant	/ At its bidding, too, the store of matter is forced at times to turn through the limbs and joints, and, flung forward, is reined in and settles back. So in the seeds, too, you must admit the same: that there is another cause of motion besides blows and weights, from which this power is born in us,

	LATIN	ENGLISH
	externa quasi vi; sed ne res ipsa necessum intestinum habeat cunctis in rebus agendis et devicta quasi cogatur ferre patique, id facit exiguum clinamen principiorum nec regione loci certa nec tempore certo.	since we see that nothing can come to be from nothing. For weight prevents all things from happening by blows, as by an outside force; but that the thing itself should not have an inner necessity in all its actions, and be forced, as if conquered, to bear and suffer, this is brought about by the tiny swerve of the first beginnings, at no fixed place and at no fixed time.
2.294	Nec stipata magis fuit umquam materiai copia nec porro maioribus intervallis; nam neque adaugescit quicquam neque deperit inde. qua propter quo nunc in motu principiorum corpora sunt, in eodem ante acta aetate fuere et post haec semper simili ratione ferentur, et quae consuerint gigni gignentur eadem condicione et erunt et crescent vique valebunt, quantum cuique datum est per foedera naturai. nec rerum summam commutare ulla potest vis; nam neque quo possit genus ullum materiai effugere ex omni quicquam est ⟨extra⟩, neque in omne unde coorta queat nova vis inrumpere et omnem naturam rerum mutare et vertere motus.	Nor was the store of matter ever more tightly packed, nor again spread out at greater intervals; for nothing is added to it, nor does anything perish from it. Therefore, in the same motion that the bodies of the first beginnings are in now, they were in ages past, and hereafter they will always be carried in the same way; and the things that have been accustomed to be born will be born under the same conditions, and will exist and grow and flourish in strength, as far as is granted to each by the laws of nature. Nor can any force change the sum of things; for there is nothing outside into which any kind of matter could escape from the universe, nor anything from which a new force could arise and burst into the universe and change the whole nature of things and turn its motions aside.
2.308	Illud in his rebus non est mirabile, quare, omnia cum rerum primordia sint in motu, summa tamen summa videatur stare quiete, praeter quam siquid proprio dat corpore motus. omnis enim longe nostris ab sensibus infra primorum natura iacet; qua propter, ubi ipsa cernere iam nequeas, motus quoque surpere debent; praesertim cum, quae possimus cernere, celent saepe tamen motus spatio diducta locorum. nam saepe in colli tondentes pabula laeta lanigerae reptant pecudes, quo quamque vocantes invitant herbae gemmantes rore recenti, et satiati agni ludunt blandeque coruscant; omnia quae nobis longe confusa videntur et velut in viridi candor consistere colli.	In these matters it is no wonder why, although all the first beginnings of things are in motion, the whole of things still seems to stand wholly at rest, except where something makes motions with its own body. For the whole nature of the first bodies lies far below our senses; so, since you cannot see the bodies themselves, their motions too must be hidden from us; especially since things we can see often hide their motions all the same when set far off at a distance.

	LATIN	ENGLISH
		For often on a hillside, cropping the lush pasture, the woolly flocks creep on to wherever, calling each one, the grasses, jeweled with fresh dew, invite them, and the lambs, well fed, play and frisk prettily; all of which seems to us, from far off, blurred together, like a patch of white resting on a green hill.
	/ praeterea magnae legiones cum loca cursu camporum complent belli simulacra cientes, fulgor ubi ad caelum se tollit totaque circum aere renidescit tellus supterque virum vi excitur pedibus sonitus clamoreque montes icti reiectant voces ad sidera mundi et circum volitant equites mediosque repente tramittunt valido quatientes impete campos; et tamen est quidam locus altis montibus, ⟨unde⟩ stare videntur et in campis consistere fulgor.	/ Again, when mighty legions fill the spaces of the plains with their charges, staging a mock war, when the glitter rises to the sky and all around the earth flashes back with bronze, and underneath, by the force of men's feet, a thunder is roused, and the mountains, struck by the shouting, hurl the voices back to the stars of heaven, and horsemen wheel about and suddenly cut across the middle of the plains, shaking them with their mighty charge— still there is some place high in the mountains from which they seem to stand still, a glitter resting on the plains.

THE SHAPES OF ATOMS

First beginnings differ in shape, which explains pleasant and harsh sensations, hardness and fluidity.

	LATIN	ENGLISH
2.333	Nunc age, iam deinceps cunctarum exordia rerum qualia sint et quam longe distantia formis, percipe, multigenis quam sint variata figuris; non quo multa parum simili sint praedita forma, sed quia non volgo paria omnibus omnia constant. nec mirum; nam cum sit eorum copia tanta, ut neque finis, uti docui, neque summa sit ulla, debent ni mirum non omnibus omnia prorsum esse pari filo similique adfecta figura.	Now come, learn next what the beginnings of all things are like, and how widely they differ in form, how varied they are in shapes of many kinds— not that only a few are endowed with a like form, but because, as a rule, they are not all identical to one another. No wonder: for since their supply is so vast that there is, as I have shown, no end to it and no total, it must surely be that not all of them, in every case, are of equal build and marked by a like shape.
2.342	Praeterea genus humanum mutaeque natantes squamigerum pecudes et laeta armenta feraeque et variae volucres, laetantia quae loca aquarum concelebrant circum ripas fontisque lacusque, et quae pervolgant nemora avia pervolitantes, quorum unum quidvis generatim sumere perge;	Besides, take the human race, and the mute swimming herds of scaly creatures, the glad cattle and wild beasts, and the many-colored birds that throng the gladdening haunts of water

	LATIN	ENGLISH
	invenies tamen inter se differre figuris. nec ratione alia proles cognoscere matrem nec mater posset prolem; quod posse videmus nec minus atque homines inter se nota cluere.	around riverbanks and springs and lakes, and those that fly all through the pathless woods and fill them: take any one of these you like, kind by kind, and you will find they still differ from each other in shape. In no other way could offspring know their mother, or mother offspring; yet we see that they can, and that they are known to one another no less than humans are.
	/ nam saepe ante deum vitulus delubra decora turicremas propter mactatus concidit aras sanguinis expirans calidum de pectore flumen; at mater viridis saltus orbata peragrans novit humi pedibus vestigia pressa bisulcis, omnia convisens oculis loca, si queat usquam conspicere amissum fetum, completque querellis frondiferum nemus adsistens et crebra revisit ad stabulum desiderio perfixa iuvenci, nec tenerae salices atque herbae rore vigentes fluminaque ulla queunt summis labentia ripis oblectare animum subitamque avertere curam, nec vitulorum aliae species per pabula laeta derivare queunt animum curaque levare; usque adeo quiddam proprium notumque requirit.	/ For often, before the fine shrines of the gods, a calf falls, slaughtered beside the incense-burning altars, breathing out a hot stream of blood from its chest; but the bereaved mother, roaming the green glades, knows the prints pressed into the ground by cloven hooves, scanning every place with her eyes, to see if anywhere she can catch sight of her lost young; standing still, she fills the leafy grove with her laments, and again and again goes back to the stall, pierced through with longing for her calf. Neither tender willows nor grass fresh with dew nor any rivers gliding brimful between their banks can delight her mind and turn aside that sudden care, nor can the sight of other calves in the glad pastures divert her mind and lighten it of care: so much does she long for something of her own, something she knows.
	/ praeterea teneri tremulis cum vocibus haedi cornigeras norunt matres agnique petulci balantum pecudes; ita, quod natura resposcit, ad sua quisque fere decurrunt ubera lactis.	/ Again, tender kids with their quavering voices know their horned mothers, and frisky lambs the flocks of bleating sheep; so, as nature demands, each runs, as a rule, to its own udder full of milk.
2.371	Postremo quodvis frumentum non tamen omne quidque suo genere inter se simile esse videbis, quin intercurrat quaedam distantia formis. concharumque genus parili ratione videmus pingere telluris gremium, qua mollibus undis litoris incurvi bibulam pavit aequor harenam.	Lastly, take any grain you like: still you will not find every one of its kind like every other, without some difference in form running between them.

	LATIN	ENGLISH
	quare etiam atque etiam simili ratione necessest, natura quoniam constant neque facta manu sunt unius ad certam formam primordia rerum, dissimili inter se quaedam volitare figura.	In the same way we see the tribe of shells painting the lap of the earth, where with soft waves the sea pounds the thirsty sand of the curving shore. So again and again, by like reasoning, it must be that, since the first beginnings of things exist by nature and were not made by hand to one fixed pattern, some of them fly about with shapes unlike each other.
2.381	Perfacile est animi ratione exsolvere nobis quare fulmineus multo penetralior ignis quam noster fluat e taedis terrestribus ortus; dicere enim possis caelestem fulminis ignem subtilem magis e parvis constare figuris atque ideo transire foramina quae nequit ignis noster hic e lignis ortus taedaque creatus. praeterea lumen per cornum transit, at imber respuitur. quare, nisi luminis illa minora corpora sunt quam de quibus est liquor almus aquarum?	It is very easy for us to explain by reasoning of the mind why the fire of lightning flows far more piercingly than our own fire, which springs from earthly torches: for you could say that the heavenly fire of the thunderbolt is finer, made of small shapes, and so passes through openings that this fire of ours, sprung from wood and born of the pine torch, cannot. Again, light passes through horn, but rain is thrown back. Why, unless those bodies of light are smaller than those that make up the nourishing liquid of water?
	/ et quamvis subito per colum vina videmus perfluere, at contra tardum cunctatur olivom, aut quia ni mirum maioribus est elementis aut magis hamatis inter se perque plicatis, atque ideo fit uti non tam diducta repente inter se possint primordia singula quaeque singula per cuiusque foramina permanare.	/ And though we see wine flow through a strainer as quickly as you like, oil, by contrast, lingers sluggishly, either because, of course, it consists of larger elements, or of ones more hooked and more entangled with one another, and so it comes about that its first beginnings cannot so quickly be drawn apart from one another, each one seeping singly through each single opening.
2.398	Huc accedit uti mellis lactisque liquores iucundo sensu linguae tractentur in ore; at contra taetra absinthi natura ferique centauri foedo pertorquent ora sapore; ut facile agnoscas e levibus atque rutundis esse ea quae sensus iucunde tangere possunt, at contra quae amara atque aspera cumque videntur, haec magis hamatis inter se nexa teneri proptereaque solere vias rescindere nostris sensibus introituque suo perrumpere corpus.	Add to this that the liquids of honey and milk roll over the tongue in the mouth with a pleasant sensation, while the foul nature of wormwood and of harsh centaury twists the mouth with its loathsome taste; so you may readily see that from smooth and round elements are made the things that can touch the senses pleasantly, while whatever seems bitter and harsh

LATIN	ENGLISH
	is held together by elements more hooked, and for that reason tends to tear open paths into our senses and to break into the body as it enters.
/ omnia postremo bona sensibus et mala tactu dissimili inter se pugnant perfecta figura; ne tu forte putes serrae stridentis acerbum horrorem constare elementis levibus aeque ac musaea mele, per chordas organici quae mobilibus digitis expergefacta figurant; neu simili penetrare putes primordia forma in nares hominum, cum taetra cadavera torrent, et cum scena croco Cilici perfusa recens est araque Panchaeos exhalat propter odores; neve bonos rerum simili constare colores semine constituas, oculos qui pascere possunt, et qui conpungunt aciem lacrimareque cogunt aut foeda specie foedi turpesque videntur.	/ Lastly, all things good and bad to the senses by their touch are at war with each other, being made of unlike shapes; you must not think, perhaps, that the grating screech of a shrieking saw consists of elements just as smooth as the musaea mele (melodies of the Muses) that musicians wake with nimble fingers and shape upon the strings; nor must you think first beginnings of similar shape pierce into people's nostrils when foul carcasses are burning and when the stage has just been sprinkled with Cilician saffron and a nearby altar breathes out the perfumes of Panchaea; nor decide that the pleasing colors of things consist of similar seed—those that can feast the eyes— and those that prick the sight and force it to shed tears or look foul and ugly with their loathsome aspect.[3]
/ omnis enim, sensus quae mulcet cumque, ⟨tibi res⟩ haut sine principiali aliquo levore creatast; at contra quae cumque molesta atque aspera constat, non aliquo sine materiae squalore repertast.	/ For every thing that soothes your senses was never created without some smoothness in its first beginnings; whereas whatever proves troublesome and harsh was never produced without some roughness of matter.
2.426 Sunt etiam quae iam nec levia iure putantur esse neque omnino flexis mucronibus unca, sed magis angellis paulum prostantibus, ⟨ut quae⟩ titillare magis sensus quam laedere possint, fecula iam quo de genere est inulaeque sapores.	There are also some that cannot rightly be thought smooth nor altogether hooked with bent-back points, but rather have tiny angles jutting out a little, so that they can tickle the senses rather than hurt them; of this kind is wine lees, and the taste of elecampane.
2.431 Denique iam calidos ignis gelidamque pruinam dissimili dentata modo conpungere sensus	Then again, that hot fire and icy frost, toothed in different ways, prick the body's senses, the touch of each gives us proof.

	LATIN	ENGLISH
	corporis, indicio nobis est tactus uterque. tactus enim, tactus, pro divum numina sancta, corporis est sensus, vel cum res extera sese insinuat, vel cum laedit quae in corpore natast aut iuvat egrediens genitalis per Veneris res, aut ex offensu cum turbant corpore in ipso, semina confundunt inter se concita sensum; ut si forte manu quamvis iam corporis ipse tute tibi partem ferias atque experiare. qua propter longe formas distare necessest principiis, varios quae possint edere sensus.	For touch—yes, touch, by the holy powers of the gods!— is the body's sense, whether when something from outside works its way in, or when something born in the body hurts it or gives pleasure as it goes out in the generative acts of Venus, or when, after a collision, seeds riot within the body itself and, stirred up, throw sensation into confusion among themselves— as when, perhaps, you strike some part of your own body with your hand, and try it for yourself. Therefore the first beginnings must differ widely in their shapes, since they are able to produce such varied sensations.
2.444	Denique quae nobis durata ac spissa videntur, haec magis hamatis inter sese esse necessest et quasi ramosis alte compacta teneri. in quo iam genere in primis adamantina saxa prima acie constant ictus contemnere sueta et validi silices ac duri robora ferri aeraque quae claustris restantia vociferantur. illa quidem debent e levibus atque rutundis esse magis, fluvido quae corpore liquida constant. namque papaveris haustus itemst facilis quod aquarum; nec retinentur enim inter se glomeramina quaeque et perculsus item proclive volubilis exstat.	Then again, things that seem to us hardened and dense must consist of elements more hooked together and be held fast, deeply knit, as if by branching parts. In this class, foremost of all, adamantine rocks stand in the front line, accustomed to scorning blows, and stout flints, and the strength of hard iron, and bronze bolts that cry out as they hold firm at the doors. Those things, on the other hand, must be made rather of smooth and round elements which are liquid, with a flowing body. For a scoop of poppy seed pours as easily as water; for the little globes do not hold one another back, and when struck, each rolls just as readily downhill.
	/ omnia postremo quae puncto tempore cernis diffugere ut fumum nebulas flammasque, necessest, si minus omnia sunt e levibus atque rotundis, at non esse tamen perplexis indupedita, pungere uti possint corpus penetrareque saxa, nec tamen haerere inter se; quod cumque videmus sensibus dentatum, facile ut cognoscere possis non e perplexis, sed acutis esse elementis. sed quod amara vides eadem quae fluvida constant,	/ Lastly, all things that you see in a moment of time fly apart, like smoke, mists, and flames, must, if they are not wholly made of smooth and round elements, at least not be hampered by tangled ones, so that they can prick the body and pass into rocks and yet not cling together; so whatever we see that feels toothed to our senses, you may easily re-

3 Saffron from Cilicia (southern Asia Minor) was sprayed in theaters as a perfume; Panchaea was a legendary incense-bearing land in Arabia.

	LATIN	ENGLISH
	sudor uti maris est, minime mirabile debet ... nam quod fluvidus est, e levibus atque rotundis est, sed levibus ⟨sunt hamata⟩ admixta doloris corpora. nec tamen haec retineri hamata necessust: scilicet esse globosa tamen, cum squalida constent, provolvi simul ut possint et laedere sensus.	cognize to be made not of tangled but of pointed elements. But that you see the same things bitter which are fluid, as the sweat of the sea is, ought to be no wonder at all ... For because it is fluid, it is made of smooth and round elements, but with the smooth are mixed hooked bodies of pain. Yet these hooked ones need not be held fast together: clearly they are globular all the same, though rough, so that they can roll along together and hurt the senses.
	/ et quo mixta putes magis aspera levibus esse principiis, unde est Neptuni corpus acerbum, est ratio secernendi seorsumque videndi, umor dulcis ubi per terras crebrius idem percolatur, ut in foveam fluat ac mansuescat; linquit enim supera taetri primordia viri, aspera quo magis in terris haerescere possint.	/ And to make you believe more readily that rough first beginnings are mixed with smooth ones, making Neptune's body bitter, there is a way of separating them and seeing them apart: when that same water, becoming sweet, is filtered again and again through the earth, so that it flows into a pit and grows mild; for it leaves behind, above, the first beginnings of the foul brine, since, being rough, they are more apt to stick in the earth.
2.478	Quod quoniam docui, pergam conectere rem quae ex hoc apta fidem ducat, primordia rerum finita variare figurarum ratione. quod si non ita sit, rursum iam semina quaedam esse infinito debebunt corporis auctu. namque in eadem una cuiusvis iam brevitate corporis inter se multum variare figurae non possunt. fac enim minimis e partibus esse corpora prima tribus, vel paulo pluribus auge; nempe ubi eas partis unius corporis omnis, summa atque ima locans, transmutans dextera laevis, omnimodis expertus eris, quam quisque det ordo formai speciem totius corporis eius, quod super est, si forte voles variare figuras, addendum partis alias erit.	Now that I have taught this, I will go on to link a fact that, fastened to this, draws its proof from it: that the first beginnings of things vary within a finite range of shapes. For if this were not so, then some seeds would have to be of infinite bodily size. For within the same small compass of any one body, the shapes cannot vary much among themselves. Suppose that first bodies consist of three smallest parts, or enlarge them by a few more: surely, when you have taken all the parts of one body, placing them top and bottom, switching right with left, and tested in every way what look of form each arrangement gives to that whole body,

LATIN	ENGLISH
	then, if you want to vary the shapes further, you will have to add other parts.
inde sequetur, adsimili ratione alias ut postulet ordo, si tu forte voles etiam variare figuras. ergo formarum novitatem corporis augmen subsequitur. quare non est ut credere possis esse infinitis distantia semina formis, ne quaedam cogas inmani maximitate esse, supra quod iam docui non posse probari. iam tibi barbaricae vestes Meliboeaque fulgens purpura Thessalico concharum tacta colore, aurea pavonum ridenti imbuta lepore saecla novo rerum superata colore iacerent et contemptus odor smyrnae mellisque sapores, et cycnea mele Phoebeaque daedala chordis carmina consimili ratione oppressa silerent; namque aliis aliud praestantius exoreretur.	It will follow from this that, by like reasoning, the arrangement will call for still others, if you should want to vary the shapes yet further. So growth of body follows upon novelty of shape. Therefore it cannot be that you believe seeds differ in infinitely many shapes, or you will force some of them to be of monstrous size, which I showed above cannot be proved. Otherwise barbarian robes, and gleaming Meliboean purple dipped in the Thessalian color of shells, and the golden race of peacocks steeped in laughing charm would lie outdone by some new color of things; the scent of myrrh and the taste of honey would be scorned, and the cycnea mele (swan songs) and the intricate strains of Phoebus on the strings would, in like manner, be overwhelmed and fall silent; for one thing would always spring up surpassing another.[4]
/ cedere item retro possent in deteriores omnia sic partis, ut diximus in melioris; namque aliis aliud retro quoque taetrius esset naribus auribus atque oculis orisque sapori. quae quoniam non sunt, ⟨sed⟩ rebus reddita certa finis utrimque tenet summam, fateare necessest materiem quoque finitis differe figuris. denique ab ignibus ad gelidas hiemum usque pruinas finitumst retroque pari ratione remensumst. omnis enim calor ac frigus mediique tepores interutrasque iacent explentes ordine summam. ergo finita distant ratione creata, ancipiti quoniam mucroni utrimque notantur, hinc flammis illinc rigidis infesta pruinis.	/ Likewise, all things could fall back toward the worse in the same way as we said they could advance toward the better; for going backward, too, one thing would be more foul than another to nostrils, ears, and eyes, and to the taste of the mouth. Since these things are not so, but a fixed limit is assigned to things and holds the sum at either end, you must admit that matter too differs in a finite number of shapes. Again, from fires to the icy frosts of winter the range is finite, and it is measured back in like manner. For all heat and cold and the lukewarm between them lie between the two, filling up the sum in order. So things created differ within a finite range,

4 Meliboea, a town in Thessaly, was famed for its purple dye. The swan was sacred to Phoebus Apollo, god of music.

	LATIN	ENGLISH
		since they are marked at both ends by a double point, beset by flames on this side and by stiff frosts on that.
2.522	Quod quoniam docui, pergam conectere rem quae ex hoc apta fidem ducat, primordia rerum, inter se simili quae sunt perfecta figura, infinita cluere. etenim distantia cum sit formarum finita, necesse est quae similes sint esse infinitas aut summam materiai finitam constare, id quod non esse probavi. ... versibus ostendam corpuscula materiai ex infinito summam rerum usque tenere undique protelo plagarum continuato.	Now that I have taught this, I will go on to link a fact that, fastened to this, draws its proof from it: that the first beginnings of things that are made with a like shape are infinite in number. For since the difference of shapes is finite, those that are alike must be infinite, or else the sum of matter must be finite—which I have proved is not so. ... I will show in verse that the little bodies of matter from infinity keep up the sum of things on every side by an unbroken succession of blows.
	/ nam quod rara vides magis esse animalia quaedam fecundamque magis naturam cernis in illis, at regione locoque alio terrisque remotis multa licet genere esse in eo numerumque repleri; sicut quadripedum cum primis esse videmus in genere anguimanus elephantos, India quorum milibus e multis vallo munitur eburno, ut penitus nequeat penetrari: tanta ferarum vis est, quarum nos perpauca exempla videmus. sed tamen id quoque uti concedam, quam lubet esto unica res quaedam nativo corpore sola, cui similis toto terrarum non sit, in orbi; infinita tamen nisi erit vis materiai, unde ea progigni possit concepta, creari non poterit neque, quod super est, procrescere alique.	/ For as to your seeing that some creatures are rarer, and perceiving nature to be more fruitful in them, yet in another region and place, in distant lands, there may be many of that kind, making up the count; as we see, first among four-footed beasts, the snake-handed elephants, whose many thousands fortify India with an ivory rampart, so that it cannot be entered deep inside: so great is the host of those beasts, of which we see only a very few specimens. But still, to grant this too, let there be, if you like, some one unique thing, alone in its birth-given body, with nothing like it in the whole round of the lands; yet unless there is an infinite store of matter from which it could be conceived and brought forth, it will not be able to be created nor, further, to grow and be nourished.
	/ quippe etenim sumant alii finita per omne corpora iactari unius genitalia rei, unde ubi qua vi et quo pacto congressa coibunt materiae tanto in pelago turbaque aliena? non, ut opinor, habent rationem conciliandi: sed quasi naufragiis magnis multisque coortis disiactare solet magnum mare transtra cavernas antemnas prorem malos tonsasque natantis,	/ For suppose some were to claim that a finite number of creative bodies of one thing are tossed through the universe: from where, where, by what force, and how will they meet and come together in so vast an ocean of matter, amid an alien

	LATIN	ENGLISH
	per terrarum omnis oras fluitantia aplustra ut videantur et indicium mortalibus edant, infidi maris insidias virisque dolumque ut vitare velint, neve ullo tempore credant, subdola cum ridet placidi pellacia ponti, sic tibi si finita semel primordia quaedam constitues, aevom debebunt sparsa per omnem disiectare aestus diversi materiai, numquam in concilium ut possint compulsa coire nec remorari in concilio nec crescere adaucta; quorum utrumque palam fieri manifesta docet res, et res progigni et genitas procrescere posse.	throng? They have, I think, no means of union. But just as, when many great shipwrecks have come about, the great sea is wont to toss about thwarts, hulls, yards, prow, masts, and swimming oars, so that along all the shores of the lands floating stern-ornaments are seen, and give a sign to mortals to want to shun the snares of the faithless sea, its might and guile, and never at any time to trust it when the calm deep's treacherous enticement smiles— so, if once you posit a finite number of some first beginnings, they must, scattered through all time, be tossed apart by the conflicting tides of matter, so that they can never be driven into union and come together, nor linger in union, nor grow and increase; yet plain fact shows that both of these openly happen: things are brought forth, and once born they can grow.
	/ esse igitur genere in quovis primordia rerum / infinita palam est, unde omnia suppeditantur.	/ It is clear, then, that in every kind the first beginnings of things / are infinite, and from them all things are supplied.
2.569	Nec superare queunt motus itaque exitiales perpetuo neque in aeternum sepelire salutem, nec porro rerum genitales auctificique motus perpetuo possunt servare creata. sic aequo geritur certamine principiorum ex infinito contractum tempore bellum. nunc hic nunc illic superant vitalia rerum et superantur item. miscetur funere vagor, quem pueri tollunt visentis luminis oras; nec nox ulla diem neque noctem aurora secutast, quae non audierit mixtos vagitibus aegris ploratus, mortis comites et funeris atri.	So the motions of destruction cannot prevail forever and bury health for all eternity, nor, again, can the motions that beget and increase things preserve forever what they have created. So, in an even contest, the war of the first beginnings is waged, a war joined from infinite time. Now here, now there, the life-giving forces of things conquer, and in turn are conquered. With the funeral mingles the wail that babies raise as they look upon the shores of light; and no night has followed day, nor dawn night, that has not heard, mingled with the feeble cries of newborns, the laments that attend on death and the black funeral.
2.581		

	LATIN	ENGLISH
	Illud in his obsignatum quoque rebus habere convenit et memori mandatum mente tenere, nil esse, in promptu quorum natura videtur, quod genere ex uno consistat principiorum, nec quicquam quod non permixto semine constet. et quod cumque magis vis multas possidet in se atque potestates, ita plurima principiorum in sese genera ac varias docet esse figuras.	In these matters it is fitting also to keep this sealed and hold it stored in a mind that remembers: that there is nothing whose nature is plain to see that consists of one kind of first beginnings, and nothing that is not made of mixed seed. And the more forces and powers a thing possesses within itself, the more it shows that there are in it the most kinds of first beginnings and varied shapes.

THE GREAT MOTHER

The earth's worship as Cybele is explained as allegory; the gods take no part in our affairs.

	LATIN	ENGLISH
2.589	Principio tellus habet in se corpora prima, unde mare inmensum volventes frigora fontes adsidue renovent, habet ignes unde oriantur; nam multis succensa locis ardent sola terrae, ex imis vero furit ignibus impetus Aetnae. tum porro nitidas fruges arbustaque laeta gentibus humanis habet unde extollere possit, unde etiam fluvios frondes et pabula laeta montivago generi possit praebere ferarum. quare magna deum mater materque ferarum et nostri genetrix haec dicta est corporis una.	First, the earth holds within her first bodies from which springs, rolling cool waters, constantly renew the boundless sea; she holds the source of fires; for in many places the ground of the earth is kindled and burns, and from the depths the onslaught of Etna rages with fire. Then, too, bright crops and thriving orchards she has the means to raise up for the races of humankind, and the means, too, to offer rivers, leaves, and glad pastures to the mountain-roaming tribe of wild beasts. So she has been called Great Mother of the gods, mother of beasts, and begetter of our body—she alone.
2.600	Hanc veteres Graium docti cecinere poetae sedibus in curru biiugos agitare leones, aeris in spatio magnam pendere docentes tellurem neque posse in terra sistere terram. adiunxere feras, quia quamvis effera proles officiis debet molliri victa parentum. muralique caput summum cinxere corona, eximiis munita locis quia sustinet urbes. quo nunc insigni per magnas praedita terras horrifice fertur divinae matris imago. hanc variae gentes antiquo more sacrorum Idaeam vocitant matrem Phrygiasque catervas dant comites, quia primum ex illis finibus edunt per terrarum orbes fruges coepisse creari. Gallos attribuunt, quia, numen qui violarint Matris et ingrati genitoribus inventi sint, significare volunt indignos esse putandos, vivam progeniem qui in oras luminis edant.	Her the ancient learned poets of the Greeks have sung as driving, seated in a chariot, a pair of yoked lions, teaching that the great earth hangs in the expanse of air and that earth cannot rest upon earth. They yoked wild beasts to her because offspring, however wild, ought to be tamed and softened by the loving care of parents. And they ringed the top of her head with a mural crown because, fortified in commanding places, she upholds cities. Adorned with this emblem, the image of the divine Mother

LATIN	ENGLISH
	is carried now through great lands, striking awe. Her the various nations, by an ancient rite of worship, call the Idaean Mother, and they give her Phrygian bands as companions, because they declare that from those regions first crops began to be produced throughout the world. They assign her Galli because, as for those who have outraged the power of the Mother and been found ungrateful to their parents, they wish to show that these must be thought unworthy to bring forth living offspring into the shores of light.[5]
/ tympana tenta tonant palmis et cymbala circum concava, raucisonoque minantur cornua cantu, et Phrygio stimulat numero cava tibia mentis, telaque praeportant, violenti signa furoris, ingratos animos atque impia pectora volgi conterrere metu quae possint numine divae. ergo cum primum magnas invecta per urbis munificat tacita mortalis muta salute, aere atque argento sternunt iter omne viarum largifica stipe ditantes ninguntque rosarum floribus umbrantes matrem comitumque catervam.	/ Taut drums thunder under their palms, and hollow cymbals all around, and horns threaten with their hoarse-sounding blare, and the hollow pipe goads their minds with Phrygian rhythm; they carry weapons before them, tokens of violent frenzy, able to make the ungrateful minds and impious hearts of the crowd quake with fear of the goddess's power. So, as soon as she is borne through great cities and silently blesses mortals with her wordless grace, they strew her whole path along the streets with bronze and silver, enriching her with lavish coins, and snow down rose blossoms, shading the Mother and her band of attendants.
/ hic armata manus, Curetas nomine Grai quos memorant, Phrygias inter si forte catervas ludunt in numerumque exultant sanguine laeti terrificas capitum quatientes numine cristas, Dictaeos referunt Curetas, qui Iovis illum vagitum in Creta quondam occultasse feruntur, cum pueri circum puerum pernice chorea [armat et in numerum pernice chorea] armati in numerum pulsarent aeribus aera, ne Saturnus eum malis mandaret adeptus aeternumque daret matri sub pectore volnus.	/ Here an armed band, whom the Greeks call by name Curetes, if they happen to sport among the Phrygian troops and leap in rhythm, rejoicing in blood, shaking with a nod the terrifying crests upon their heads, recall the Dictaean Curetes, who are said once to have hidden that famous wailing of Jupiter in Crete,

5 The Great Mother is Cybele, the Phrygian goddess of Mount Ida, whose cult reached Rome in 204 BC; the Galli were her castrated priests.

	LATIN	ENGLISH
	propterea magnam armati matrem comitantur, aut quia significant divam praedicere ut armis ac virtute velint patriam defendere terram praesidioque parent decorique parentibus esse. quae bene et eximie quamvis disposta ferantur, longe sunt tamen a vera ratione repulsa.	when, boys around a boy, in a swift dance, [arms and in rhythm with a swift dance] armed, in rhythm, they beat bronze on bronze, so that Saturn might not seize him and consign him to his jaws and deal the mother an everlasting wound deep in her heart. That is why they escort the Great Mother in arms; or else because they signify that the goddess bids men, with arms and courage, to be willing to defend their native land, and to prepare to be a protection and a glory to their parents. But though these things are told in fine and excellent order, they are far removed, all the same, from true reasoning.[6]
	/ omnis enim per se divom natura necessest inmortali aevo summa cum pace fruatur semota ab nostris rebus seiunctaque longe; nam privata dolore omni, privata periclis, ipsa suis pollens opibus, nihil indiga nostri, nec bene promeritis capitur neque tangitur ira. terra quidem vero caret omni tempore sensu, et quia multarum potitur primordia rerum, multa modis multis effert in lumina solis. hic siquis mare Neptunum Cereremque vocare constituet fruges et Bacchi nomine abuti mavolt quam laticis proprium proferre vocamen, concedamus ut hic terrarum dictitet orbem esse deum matrem, dum vera re tamen ipse religione animum turpi contingere parcat.	/ For the whole nature of the gods must of itself enjoy immortal life in the deepest peace, far removed and separated from our affairs; for, free from all pain, free from dangers, strong in its own resources, needing nothing from us, it is neither won over by good service nor touched by anger. The earth, in truth, is at all times without sensation, and because it possesses the first beginnings of many things, it brings forth many things in many ways into the light of the sun. Here, if anyone decides to call the sea Neptune, and grain Ceres, and prefers to misuse the name of Bacchus rather than utter the proper name of the liquid, let us allow him to keep calling the round world the Mother of the gods, provided that in reality he himself refrains from tainting his mind with base religion.
2.660	Saepe itaque ex uno tondentes gramina campo lanigerae pecudes et equorum duellica proles buceriaeque greges eodem sub tegmine caeli ex unoque sitim sedantes flumine aquai dissimili vivont specie retinentque parentum naturam et mores generatim quaeque imitantur.	And so, often, cropping the grass of a single field, woolly flocks and the warlike breed of horses and herds of horned cattle, under the same canopy of sky, slaking their thirst from a single stream of water, live with unlike appearances, and keep their par-

6 The Curetes, on Crete's Mount Dicte, clashed their arms to drown the infant Jupiter's cries so that his father Saturn would not swallow him.

	LATIN	ENGLISH
	tanta est in quovis genere herbae materiai dissimilis ratio, tanta est in flumine quoque.	ents' nature, and each after its kind copies their ways. So great is the difference of matter in any kind of grass, so great in any river too.
2.668	Hinc porro quamvis animantem ex omnibus unam ossa cruor venae calor umor viscera nervi constituunt, quae sunt porro distantia longe, dissimili perfecta figura principiorum.	Then again, any single living creature among them all is made up of bones, blood, veins, heat, moisture, flesh, sinews, which in turn differ widely, made of first beginnings of unlike shape.
2.672	Tum porro quae cumque igni flammata cremantur. si nil praeterea, tamen haec in corpore tradunt, unde ignem iacere et lumen submittere possint scintillasque agere ac late differre favillam. cetera consimili mentis ratione peragrans invenies igitur multarum semina rerum corpore celare et varias cohibere figuras.	Then again, take whatever things are set aflame and burned by fire: if nothing else, they still carry in their body the means to throw out fire and send up light and shoot out sparks and scatter ash far and wide. Ranging over everything else with the same reasoning of mind, you will find, then, that they hide the seeds of many things in their body and hold within them varied shapes.
2.679	Denique multa vides, quibus et color et sapor una reddita sunt cum odore in primis pleraque poma. haec igitur variis debent constare figuris; nidor enim penetrat qua fucus non it in artus, fucus item sorsum, ⟨sorsum⟩ sapor insinuatur sensibus; ut noscas primis differre figuris. dissimiles igitur formae glomeramen in unum conveniunt et res permixto semine constant.	Again, you see many things to which color and taste together are given along with smell—above all, most fruits. These, then, must consist of varied shapes; for smell penetrates into our limbs where color does not go, and color likewise separately, separately taste, steals into our senses; so you may know they differ in their first shapes. Unlike forms, then, come together into one mass, and things consist of mixed seed.
2.688	Quin etiam passim nostris in versibus ipsis multa elementa vides multis communia verbis, cum tamen inter se versus ac verba necesse est confiteare alia ex aliis constare elementis; non quo multa parum communis littera currat aut nulla inter se duo sint ex omnibus isdem, sed quia non volgo paria omnibus omnia constant. sic aliis in rebus item communia multa multarum rerum cum sint, primordia rerum dissimili tamen inter se consistere summa possunt; ut merito ex aliis constare feratur humanum genus et fruges arbustaque laeta.	Indeed, all through these very verses of mine you see many elements—letters—common to many words, and yet you must admit that verses and words are made up of letters that differ from one another; not that only a few common letters run through them, or that no two consist of exactly the same, but because, as a rule, they are not all identical to one another. So too in other things, though much is shared in common by many things, the first beginnings of things

LATIN	ENGLISH
	can still make up wholes unlike each other; so that it may rightly be said that from different ones are made the human race, and crops, and thriving trees.
2.700 Nec tamen omnimodis conecti posse putandum est omnia; nam volgo fieri portenta videres, semiferas hominum species existere et altos inter dum ramos egigni corpore vivo multaque conecti terrestria membra marinis, tum flammam taetro spirantis ore Chimaeras pascere naturam per terras omniparentis. quorum nil fieri manifestum est, omnia quando seminibus certis certa genetrice creata conservare genus crescentia posse videmus. scilicet id certa fieri ratione necessust. nam sua cuique cibis ex omnibus intus in artus corpora discedunt conexaque convenientis efficiunt motus; at contra aliena videmus reicere in terras naturam, multaque caecis corporibus fugiunt e corpore percita plagis, quae neque conecti quoquam potuere neque intus vitalis motus consentire atque imitari.	Yet you must not think that all things can be joined in every way; for you would see monsters arise everywhere, half-beast forms of men come into being, and tall branches sometimes sprouting from a living body, and many limbs of land creatures joined to those of sea creatures, and Chimaeras breathing flame from foul mouths fed by all-begetting nature throughout the lands. Plainly none of this happens, since we see that all things, created from fixed seeds by a fixed mother, can preserve their kind as they grow. Clearly this must happen according to a fixed principle. For from all foods, its own proper bodies pass inside into the limbs of each creature and, joined together, produce the fitting motions; but on the other hand we see nature throw alien bodies back onto the earth, and many, with unseen bodies, flee from the body, driven out by blows, which could neither join anywhere nor, within, move in harmony with the vital motions and imitate them.
/ sed ne forte putes animalia sola teneri legibus his, quaedam ratio res terminat omnis nam vel uti tota natura dissimiles sunt inter se genitae res quaeque, ita quamque necessest dissimili constare figura principiorum; non quo multa parum simili sint praedita forma, sed quia non volgo paria omnibus omnia constant. semina cum porro distent, differre necessust intervalla vias conexus pondera plagas concursus motus; quae non animalia solum corpora seiungunt, sed terras ac mare totum secernunt caelumque a terris omne retentant.	/ But lest you think that living creatures alone are bound by these laws, a certain principle sets limits to all things. For just as things begotten are unlike one another in their whole nature, so each must consist of first beginnings of unlike shape; not that only a few are endowed with a like form, but because, as a rule, they are not all identical to one another. Further, since seeds differ, there must be differences in their intervals, paths, connections, weights, blows, collisions, motions; and these not only separate the bodies of animals, but divide the lands and the whole sea and hold all the sky apart from the earth.

ATOMS HAVE NO COLOR

Color, heat, sound, smell and sensation belong to compounds, not to the first beginnings.

	LATIN	ENGLISH
2.730	Nunc age dicta meo dulci quaesita labore percipe, ne forte haec albis ex alba rearis principiis esse, ante oculos quae candida cernis, aut ea quae nigrant nigro de semine nata; nive alium quemvis quae sunt inbuta colorem, propterea gerere hunc credas, quod materiai corpora consimili sint eius tincta colore; nullus enim color est omnino materiai corporibus, neque par rebus neque denique dispar. in quae corpora si nullus tibi forte videtur posse animi iniectus fieri, procul avius erras. nam cum caecigeni, solis qui lumina numquam dispexere, tamen cognoscant corpora tactu ex ineunte aevo nullo coniuncta colore, scire licet nostrae quoque menti corpora posse vorti in notitiam nullo circum lita fuco.	Now come, learn words sought out by my sweet labor, lest you perhaps suppose that the white things you see shining before your eyes are made of white first beginnings, or that black things are born of black seed; or believe that things steeped in any other color bear it because the bodies of matter are dyed with a color like it; for the bodies of matter have no color at all, neither like things nor unlike. And if perhaps it seems to you that no casting of the mind can reach such bodies, you wander far off the path. For since the blind from birth, who have never beheld the light of the sun, still know bodies by touch that from the beginning of their life were joined to no color, you may know that our mind too can come to a notion of bodies that are coated with no color.
	/ denique nos ipsi caecis quaecumque tenebris / tangimus, haud ullo sentimus tincta colore.	/ Again, whatever we ourselves touch in blind darkness / we do not perceive as tinged with any color.
2.748	Quod quoniam vinco fieri, nunc esse docebo. omnis enim color omnino mutatur in omnis; quod facere haud ullo debent primordia pacto; immutabile enim quiddam superare necessest, ne res ad nihilum redigantur funditus omnes; nam quod cumque suis mutatum finibus exit, continuo hoc mors est illius quod fuit ante. proinde colore cave contingas semina rerum, ne tibi res redeant ad nihilum funditus omnes.	Since I have won the point that this can be, I will now teach that it is so. For every color changes entirely into every other; and this the first beginnings must by no means do; for something unchangeable must survive, so that all things may not be reduced utterly to nothing; for whatever changes and passes out of its own bounds, that is at once the death of what it was before. So beware of tinging the seeds of things with color, or else all things would return utterly to nothing for you.
2.757	Praeterea si nulla coloris principiis est reddita natura et variis sunt praedita formis, e quibus omnigenus gignunt variantque colores, propterea magni quod refert, semina quaeque cum quibus et quali positura contineantur	Besides, if no nature of color has been given to the first beginnings, and they are endowed with various shapes from which they produce and vary colors of every kind,

LATIN	ENGLISH
et quos inter se dent motus accipiantque, perfacile extemplo rationem reddere possis, cur ea quae nigro fuerint paulo ante colore, marmoreo fieri possint candore repente, ut mare, cum magni commorunt aequora venti, vertitur in canos candenti marmore fluctus; dicere enim possis, nigrum quod saepe videmus, materies ubi permixta est illius et ordo principiis mutatus et addita demptaque quaedam, continuo id fieri ut candens videatur et album.	then, since it matters greatly for all the seeds with what others and in what position they are held together, and what motions they give and receive among themselves, you could at once very easily give an account of why things that were black in color a moment ago can suddenly become as white as marble— as the sea, when great winds have churned its surface, turns into white-capped waves of gleaming marble. For you could say that what we often see as black, once its matter has been mixed up, and the order of its first beginnings changed, and some things added and some taken away, at once comes to look gleaming and white.
/ quod si caeruleis constarent aequora ponti seminibus, nullo possent albescere pacto; nam quo cumque modo perturbes caerula quae sint, numquam in marmoreum possunt migrare colorem. sin alio atque alio sunt semina tincta colore, quae maris efficiunt unum purumque nitorem, ut saepe ex aliis formis variisque figuris efficitur quiddam quadratum unaque figura, conveniebat, ut in quadrato cernimus esse dissimiles formas, ita cernere in aequore ponti aut alio in quovis uno puroque nitore dissimiles longe inter se variosque colores. praeterea nihil officiunt obstantque figurae dissimiles, quo quadratum minus omne sit extra; at varii rerum inpediunt prohibentque colores, quo minus esse uno possit res tota nitore.	/ But if the waters of the sea were made of blue seeds, they could in no way turn white; for however you stir up things that are blue, they can never pass over into the color of marble. But if the seeds are dyed now one color, now another, and together produce the sea's one pure sheen, just as often from other forms and varied shapes something square and of a single shape is made, then, just as we see in a square that there are unlike forms, so we ought to see in the surface of the sea, or in anything else of one pure sheen, colors widely unlike one another and varied. Besides, unlike shapes do not hinder or stand in the way of the whole being square on the outside; but the various colors of things obstruct and prevent the whole thing from being of one single sheen.
2.788 Tum porro quae ducit et inlicit ut tribuamus principiis rerum non numquam causa colores, occidit, ex albis quoniam non alba creantur, nec quae nigra cluent de nigris, sed variis ex. quippe etenim multo proclivius exorientur candida de nullo quam nigro nata colore aut alio quovis, qui contra pugnet et obstet.	Then again, the reason that leads and lures us at times to assign colors to the first beginnings of things falls away, since white things are not created from white, nor things called black from black, but from varied seeds. For indeed white things will arise far more readily from no color at all than from black or any other color that fights against it and resists.

	LATIN	ENGLISH
2.795	Praeterea quoniam nequeunt sine luce colores esse neque in lucem existunt primordia rerum, scire licet quam sint nullo velata colore; qualis enim caecis poterit color esse tenebris? lumine quin ipso mutatur propterea quod recta aut obliqua percussus luce refulget; pluma columbarum quo pacto in sole videtur, quae sita cervices circum collumque coronat; namque alias fit uti claro sit rubra pyropo, inter dum quodam sensu fit uti videatur inter caeruleum viridis miscere zmaragdos. caudaque pavonis, larga cum luce repleta est, consimili mutat ratione obversa colores; qui quoniam quodam gignuntur luminis ictu, scire licet, sine eo fieri non posse putandum est.	Besides, since colors cannot exist without light, and the first beginnings of things do not come out into the light, you may know that they are clothed in no color at all; for what color could there be in blind darkness? Indeed, color changes in the light itself, according to whether it gleams when struck by direct or slanting light: so the plumage of doves appears in the sun, the plumage that sits around the nape and rings the neck; for sometimes it happens to be red as a bright garnet, at other times, as one sees it, it seems to mix green emeralds with blue. And the peacock's tail, when it is filled with abundant light, changes its colors in just the same way as it turns; and since these are produced by a certain impact of light, you may know that they must be thought unable to arise without it.
2.810	Et quoniam plagae quoddam genus excipit in se pupula, cum sentire colorem dicitur album, atque aliud porro, nigrum cum et cetera sentit, nec refert ea quae tangas quo forte colore praedita sint, verum quali magis apta figura, scire licet nihil principiis opus esse colore, sed variis formis variantes edere tactus.	And since the pupil receives a certain kind of blow when it is said to perceive the color white, and another kind again when it perceives black and the rest, and it does not matter what color the things you touch may have, but rather with what shape they are fitted, you may know that the first beginnings have no need of color, but produce varied touches by their various forms.
2.817	Praeterea quoniam non certis certa figuris est natura coloris et omnia principiorum formamenta queunt in quovis esse nitore, cur ea quae constant ex illis non pariter sunt omnigenus perfusa coloribus in genere omni? conveniebat enim corvos quoque saepe volantis ex albis album pinnis iactare colorem et nigros fieri nigro de semine cycnos aut alio quovis uno varioque colore.	Besides, since color is not fixed by nature to fixed shapes, and all the forms of the first beginnings can exist in any sheen whatever, why are the things made of them not likewise, in every kind, suffused with colors of every sort? For then crows too, as they fly, ought often to flash white color from white wings, and swans to become black from black seed, or any other color, single or varied.
2.826	Quin etiam quanto in partes res quaeque minutas distrahitur magis, hoc magis est ut cernere possis	Moreover, the more each thing is pulled apart into tiny pieces, the more you can see

	LATIN	ENGLISH
	evanescere paulatim stinguique colorem; ut fit ubi in parvas partis discerpitur ostrum: purpura poeniceusque color clarissimus multo, filatim cum distractum est, disperditur omnis; noscere ut hinc possis prius omnem efflare colorem particulas, quam discedant ad semina rerum.	its color gradually fade and die out, as happens when purple cloth is torn into small shreds: the purple, the scarlet, far the brightest of colors, when pulled apart thread by thread, is entirely lost; from this you may learn that the particles breathe out all their color before they are broken down to the seeds of things.
2.834	Postremo quoniam non omnia corpora vocem mittere concedis neque odorem, propterea fit ut non omnibus adtribuas sonitus et odores: sic oculis quoniam non omnia cernere quimus, scire licet quaedam tam constare orba colore quam sine odore ullo quaedam sonituque remota, nec minus haec animum cognoscere posse sagacem quam quae sunt aliis rebus privata notare.	Lastly, since you grant that not all bodies give out a voice or a smell, it follows for that reason that you do not assign sounds and smells to all: so, since we cannot perceive all things with our eyes, you may know that some things exist as bereft of color as some are without any smell and removed from sound, and that the keen mind can recognize these no less than it can mark things deprived of other qualities.
2.842	Sed ne forte putes solo spoliata colore corpora prima manere, etiam secreta teporis sunt ac frigoris omnino calidique vaporis, et sonitu sterila et suco ieiuna feruntur, nec iaciunt ullum proprium de corpore odorem.	But in case you think that the first bodies remain stripped of color alone: they are also set apart from warmth and cold entirely, and from hot vapor; they move along barren of sound and starved of flavor, and throw off from their body no odor of their own.
	/ sicut amaracini blandum stactaeque liquorem et nardi florem, nectar qui naribus halat, cum facere instituas, cum primis quaerere par est, quod licet ac possis reperire, inolentis olivi naturam, nullam quae mittat naribus auram, quam minime ut possit mixtos in corpore odores concoctosque suo contractans perdere viro, propter eandem ⟨rem⟩ debent primordia rerum non adhibere suum gignundis rebus odorem nec sonitum, quoniam nihil ab se mittere possunt, nec simili ratione saporem denique quemquam nec frigus neque item calidum tepidumque vaporem, cetera, quae cum ita sunt tamen ut mortalia constent, molli lenta, fragosa putri, cava corpore raro, omnia sint a principiis seiuncta necessest, inmortalia si volumus subiungere rebus	/ Just as, when you set out to make the soothing liquid of marjoram and myrrh, and the flower of nard that breathes nectar to the nostrils, it is right first of all to look for, as far as you may and can find it, an olive oil without scent, of a nature that sends no breath to the nostrils, so that it may least be able to corrupt the scents mixed into its body and blended there by touching them with its own tang— for the same reason the first beginnings of things must bring no scent of their own to the things they produce, nor sound, since they can send nothing out from

	LATIN	ENGLISH
	fundamenta, quibus nitatur summa salutis; ne tibi res redeant ad nihilum funditus omnes.	themselves, nor, in the same way, any flavor at all, nor cold, nor likewise hot or warm vapor, and all the rest—things that, being what they are, are mortal in make-up: the pliant with soft body, the brittle with crumbling, the hollow with porous— all these must be kept apart from the first beginnings, if we wish to lay immortal foundations under things, on which the sum of their survival may rest; or else all things would return utterly to nothing for you.
2.865	Nunc ea quae sentire videmus cumque necessest ex insensilibus tamen omnia confiteare principiis constare. neque id manufesta refutant nec contra pugnant, in promptu cognita quae sunt, sed magis ipsa manu ducunt et credere cogunt ex insensilibus, quod dico, animalia gigni. quippe videre licet vivos existere vermes stercore de taetro, putorem cum sibi nacta est intempestivis ex imbribus umida tellus.	Now, whatever we see to have sensation, you must still admit is all made up of first beginnings without sensation. Nor do the plain facts refute this or fight against it, the things known to us and ready to hand; rather, they themselves lead us by the hand and compel us to believe that living creatures, as I say, are born from things without sensation. For we can see living worms emerging from foul dung, when the sodden earth has taken on a rot from untimely rains.
2.874	Praeterea cunctas itidem res vertere sese. vertunt se fluvii in frondes et pabula laeta in pecudes, vertunt pecudes in corpora nostra naturam, et nostro de corpore saepe ferarum augescunt vires et corpora pennipotentum. ergo omnes natura cibos in corpora viva vertit et hinc sensus animantum procreat omnes, non alia longe ratione atque arida ligna explicat in flammas et ⟨in⟩ ignis omnia versat. iamne vides igitur magni primordia rerum referre in quali sint ordine quaeque locata et commixta quibus dent motus accipiantque?	Besides, all things likewise change themselves. Rivers change themselves into leaves, and lush pastures into cattle; cattle change their nature into our bodies; and from our bodies, often, the strength of wild beasts grows, and the bodies of the mighty-winged birds. So nature turns all food into living bodies and from it brings forth all the senses of living creatures, in much the same way as it unfolds dry wood into flames and turns it all into fire. Do you see now, then, that it matters greatly in what order the first beginnings of things are each placed, and with what others they are mixed, to give and receive motions?
2.886	Tum porro, quid id est, animum quod percutit, ipsum, quod movet et varios sensus expromere cogit, ex insensilibus ne credas sensile gigni?	Then again, what is it that strikes the mind itself, that moves it and compels it to express various feelings,

	LATIN	ENGLISH
	ni mirum lapides et ligna et terra quod una mixta tamen nequeunt vitalem reddere sensum. illud in his igitur rebus meminisse decebit, non ex omnibus omnino, quaecumque creant res sensilia, extemplo me gigni dicere sensus, sed magni referre ea primum quantula constent, sensile quae faciunt, et qua sint praedita forma, motibus ordinibus posituris denique quae sint.	so that you won't believe the sentient is born from the insentient? Surely it is that stones and wood and earth, mixed together, still cannot yield living sensation. In these matters, then, it will be well to remember that I do not say that sensations are born at once from any and all things whatever that create sentient beings, but that it matters greatly, first, how tiny they are, the things that make the sentient, and with what shape they are endowed, and lastly what they are in motions, orders, positions.
	/ quarum nil rerum in lignis glaebisque videmus; et tamen haec, cum sunt quasi putrefacta per imbres, vermiculos pariunt, quia corpora materiai antiquis ex ordinibus permota nova re conciliantur ita ut debent animalia gigni.	/ None of these do we see in wood and clods; and yet these, when they have been rotted, as it were, by rains, give birth to little worms, because the bodies of matter, stirred from their old orders by a new event, are brought into union in such a way that living things must be born.
2.902	Deinde ex sensilibus qui sensile posse creari constituunt, porro ex aliis sentire sueti ... mollia cum faciunt; nam sensus iungitur omnis visceribus nervis venis, quae cumque videmus mollia mortali consistere corpore creta. sed tamen esto iam posse haec aeterna manere; nempe tamen debent aut sensum partis habere aut similis totis animalibus esse putari. at nequeant per se partes sentire necesse est: namque animus sensus membrorum respuit omnis, nec manus a nobis potis est secreta neque ulla corporis omnino sensum pars sola tenere. linquitur ut totis animantibus adsimulentur, vitali ut possint consentire undique sensu.	Next, those who maintain that the sentient can be created from sentient things, and these in turn from others used to feeling, ... when they make them soft; for all sensation is joined to flesh, sinews, veins—all things that we see are soft and made of mortal body. But still, grant for now that these could remain eternal: surely, even so, they must either have the sensation of a part or be thought to be like whole living creatures. But parts, necessarily, cannot feel by themselves: for the mind rejects every sensation of the limbs on their own, and neither a hand cut off from us nor any part of the body at all can keep sensation by itself. It remains that they must resemble whole living creatures, so that they can feel in harmony with living sensation throughout.
	/ qui poterunt igitur rerum primordia dici et leti vitare vias, animalia cum sint, atque animalia ⟨sint⟩ mortalibus una eademque? quod tamen ut possint, at coetu concilioque nil facient praeter volgum turbamque animantum,	/ How, then, can they be called the first beginnings of things and avoid the paths of death, since they are living creatures,

	LATIN	ENGLISH
	scilicet ut nequeant homines armenta feraeque inter sese ullam rem gignere conveniundo. sic itidem quae sentimus sentire necessest. quod si forte suum dimittunt corpore sensum atque alium capiunt, quid opus fuit adtribui id quod detrahitur? tum praeterea, quod fudimus ante, quatinus in pullos animalis vertier ova cernimus alituum vermisque effervere terra, intempestivos quam putor cepit ob imbris, scire licet gigni posse ex non sensibus sensus.	and living creatures are one and the same as mortal ones? Yet even supposing they could, by meeting and union they will make nothing but a crowd and throng of living creatures, just as, surely, men, herds, and wild beasts cannot beget any other thing by coming together with one another. So likewise the things we feel must themselves feel. But if perhaps they shed their own sensation from their body and take on another, what need was there to assign what is taken away? Then besides, as we set out before, since we see the eggs of birds turn into living chicks, and worms swarm up out of the earth when rot has seized it after untimely rains, you may know that sensation can be born from what has none.
2.931	Quod si forte aliquis dicet, dum taxat oriri posse ex non sensu sensus mutabilitate, aut aliquo tamquam partu quod proditur extra, huic satis illud erit planum facere atque probare, non fieri partum nisi concilio ante coacto, nec quicquam commutari sine conciliatu.	But if someone perhaps says that sensation can arise from non-sensation only through change, or through a kind of birth by which it is brought forth, it will be enough to make plain to him and prove that there is no birth unless a union has first been formed, and that nothing changes without uniting.
2.937	Principio nequeunt ullius corporis esse sensus ante ipsam genitam naturam animantis, ni mirum quia materies disiecta tenetur aere fluminibus terris terraque creatis, nec congressa modo vitalis convenientes contulit inter se motus, quibus omnituentes accensi sensus animantem quamque tuentur.	First of all, there can be no senses in any body before the nature of the living creature itself is born, because, of course, its matter is held scattered in air, rivers, earth, and the things born from earth, and has not come together in the right way and brought the fitting vital motions together, by which the all-seeing senses are kindled and watch over each living creature.
2.944	Praeterea quamvis animantem grandior ictus, quam patitur natura, repente adfligit et omnis corporis atque animi pergit confundere sensus. dissoluuntur enim positurae principiorum et penitus motus vitales inpediuntur, donec materies omnis concussa per artus	Besides, a blow heavier than nature can bear suddenly strikes down any living creature, and goes on to throw all the senses of body and mind into confusion. For the positions of the first beginnings are broken up,

	LATIN	ENGLISH
	vitalis animae nodos a corpore solvit dispersamque foras per caulas eiecit omnis; nam quid praeterea facere ictum posse reamur oblatum, nisi discutere ac dissolvere quaeque?	and the vital motions are deeply obstructed, until the matter, shaken throughout the limbs, loosens the knots of the vital spirit from the body and, scattering it, drives it out through all the pores; for what else can we suppose a blow can do when dealt, except shatter and dissolve each thing?
	/ fit quoque uti soleant minus oblato acriter ictu reliqui motus vitalis vincere saepe, vincere et ingentis plagae sedare tumultus inque suos quicquid rursus revocare meatus et quasi iam leti dominantem in corpore motum discutere ac paene amissos accendere sensus; nam qua re potius leti iam limine ab ipso ad vitam possint conlecta mente reverti, quam quo decursum prope iam siet ire et abire?	/ It also happens, when a blow is dealt less sharply, that the remaining vital motions often win— win, and calm the huge disturbance of the blow, call each thing back again into its own courses, shake off the motion of death, as it were already master in the body, and rekindle the senses nearly lost; for why else could creatures, from the very threshold of death, rally their minds and come back to life, rather than go on to where their course is nearly run, and pass away?
2.963	Praeterea, quoniam dolor est, ubi materiai corpora vi quadam per viscera viva per artus sollicitata suis trepidant in sedibus intus, inque locum quando remigrant, fit blanda voluptas, scire licet nullo primordia posse dolore temptari nullamque voluptatem capere ex se; quandoquidem non sunt ex ullis principiorum corporibus, quorum motus novitate laborent aut aliquem fructum capiant dulcedinis almae. haut igitur debent esse ullo praedita sensu.	Besides, since pain occurs when the bodies of matter, disturbed by some force through the living flesh and limbs, tremble within in their seats, and when they move back into place sweet pleasure arises, you may know that the first beginnings cannot be assailed by any pain, nor take any pleasure from themselves, since they are not made up of any bodies of first beginnings by whose change of motion they might suffer or reap some fruit of life-giving sweetness. They should not, then, be endowed with any sensation.
2.973	Denique uti possint sentire animalia quaeque, principiis si iam est sensus tribuendus eorum, quid, genus humanum propritim de quibus auctumst? scilicet et risu tremulo concussa cachinnant et lacrimis spargunt rorantibus ora genasque multaque de rerum mixtura dicere callent et sibi proporro quae sint primordia quaerunt; quando quidem totis mortalibus adsimulata ipsa quoque ex aliis debent constare elementis, inde alia ex aliis, nusquam consistere ut ausis;	Lastly, if, so that every living creature can feel, sensation must now be assigned to its first beginnings, what of those from which the human race is specifically made? No doubt they shake with trembling laughter and guffaw, and sprinkle their faces and cheeks with dewy tears, and are skilled at saying much about the mixture of things,

	LATIN	ENGLISH
	quippe sequar, quod cumque loqui ridereque dices et sapere, ex aliis eadem haec facientibus ut sit.	and go on to ask what their own first beginnings are; since, being made like whole mortal beings, they too must be made up of other elements, and those in turn of others, so that you never dare to stop; for I will follow you: whatever you say speaks and laughs and is wise must be made of others that do these same things.
	/ quod si delira haec furiosaque cernimus esse et ridere potest non ex ridentibus auctus, et sapere et doctis rationem reddere dictis non ex seminibus sapientibus atque disertis, qui minus esse queant ea quae sentire videmus seminibus permixta carentibus undique sensu?	/ But if we see that this is raving madness, and that one can laugh without being made of laughing things, and be wise and give an account in learned words without being made of wise and eloquent seeds, why could the things we see have sensation not be compounded of seeds wholly lacking in sensation?
2.991	Denique caelesti sumus omnes semine oriundi; omnibus ille idem pater est, unde alma liquentis umoris guttas mater cum terra recepit, feta parit nitidas fruges arbustaque laeta et genus humanum, parit omnia saecla ferarum, pabula cum praebet, quibus omnes corpora pascunt et dulcem ducunt vitam prolemque propagant; qua propter merito maternum nomen adepta est. cedit item retro, de terra quod fuit ante, in terras, et quod missumst ex aetheris oris, id rursum caeli rellatum templa receptant.	Lastly, we are all sprung from heavenly seed; all have that same father, from whom our nourishing mother, the earth, when she has received the liquid drops of moisture, grows pregnant and bears shining crops and lush trees and the human race, bears every species of wild beast, providing the food on which all feed their bodies and lead a sweet life and propagate their young; and so she has rightly won the name of mother. Likewise what came from earth before goes back into the earth, and what was sent from the shores of the upper air is carried back again and received by the temples of the sky.
	/ nec sic interemit mors res ut materiai corpora conficiat, sed coetum dissupat ollis; inde aliis aliud coniungit et efficit, omnis res ut convertant formas mutentque colores et capiant sensus et puncto tempore reddant; ut noscas referre earum primordia rerum cum quibus et quali positura contineantur et quos inter se dent motus accipiantque, neve putes aeterna penes residere potesse corpora prima quod in summis fluitare videmus rebus et interdum nasci subitoque perire.	/ Nor does death destroy things in such a way that it annihilates the bodies of matter; it breaks up their gathering. Then it joins one to another, and brings it about that all things change their forms and alter their colors and take on sensation and give it up in an instant; so that you may know it matters, for those first beginnings of things, with what others and in what position they are held together, and what motions they give and receive among themselves, and so that you may not think that there can

	LATIN	ENGLISH
		reside in the eternal first bodies what we see floating on the surface of things, at times being born and suddenly perishing.
	/ quin etiam refert nostris in versibus ipsis cum quibus et quali sint ordine quaeque locata; namque eadem caelum mare terras flumina solem significant, eadem fruges arbusta animantis; si non omnia sunt, at multo maxima pars est consimilis; verum positura discrepitant res. sic ipsis in rebus item iam materiai [intervalla vias conexus pondera plagas] concursus motus ordo positura figurae cum permutantur, mutari res quoque debent.	/ Indeed, even in these verses of mine it matters with what others and in what order each letter is placed; for the same letters denote sky, sea, lands, rivers, sun, and the same, crops, trees, living creatures; if not all, still by far the greatest part is alike; but by position the words differ. So too in real things, likewise, when of matter [the intervals, paths, connections, weights, blows,] the collisions, motions, order, position, shapes are changed, the things too must change.

COUNTLESS WORLDS

Ours is one of many worlds, made by nature without the gods, and it is already growing old.

	LATIN	ENGLISH
2.1023	Nunc animum nobis adhibe veram ad rationem. nam tibi vehementer nova res molitur ad auris accedere et nova se species ostendere rerum. sed neque tam facilis res ulla est, quin ea primum difficilis magis ad credendum constet, itemque nil adeo magnum neque tam mirabile quicquam, quod non paulatim minuant mirarier omnes, principio caeli clarum purumque colorem quaeque in se cohibet, palantia sidera passim, lunamque et solis praeclara luce nitorem; omnia quae nunc si primum mortalibus essent ex improviso si sint obiecta repente, quid magis his rebus poterat mirabile dici, aut minus ante quod auderent fore credere gentes? nil, ut opinor; ita haec species miranda fuisset.	Now turn your mind to me, to true reasoning. For a new thing is struggling hard to reach your ears, and a new aspect of things to show itself. But there is nothing so easy that it does not at first prove harder to believe, and likewise nothing so great or so wonderful that everyone does not, little by little, wonder at it less. Take first the clear, pure color of the sky and all it holds within it, the stars wandering everywhere, the moon, and the sun's radiance with its brilliant light: if all these were now shown to mortals for the first time, if they were suddenly, unexpectedly, set before them, what could be called more wonderful than these things, or what would the nations beforehand have dared less to believe could be? Nothing, I think: so marvelous would this sight have been.
	/ quam tibi iam nemo fessus satiate videndi, suspicere in caeli dignatur lucida templa. desine qua propter novitate exterritus ipsa expuere ex animo rationem, sed magis acri	/ Yet now no one, weary and sated with seeing it, deigns to look up at the shining temples of the sky. So stop being terrified by mere novelty into spitting reasoning out of your mind; rather,

	LATIN	ENGLISH
	iudicio perpende, et si tibi vera videntur, dede manus, aut, si falsum est, accingere contra. quaerit enim rationem animus, cum summa loci sit infinita foris haec extra moenia mundi, quid sit ibi porro, quo prospicere usque velit mens atque animi iactus liber quo pervolet ipse.	weigh it with keen judgment, and if it seems true to you, surrender; or, if it is false, arm yourself against it. For the mind seeks a reason, since the sum of space is infinite outside, beyond these walls of the world, for what lies there, out where the mind longs to gaze and where the free leap of the mind itself flies through.
2.1048	Principio nobis in cunctas undique partis et latere ex utroque ⟨supra⟩ supterque per omne nulla est finis; uti docui, res ipsaque per se vociferatur, et elucet natura profundi. nullo iam pacto veri simile esse putandumst, undique cum vorsum spatium vacet infinitum seminaque innumero numero summaque profunda multimodis volitent aeterno percita motu, hunc unum terrarum orbem caelumque creatum, nil agere illa foris tot corpora materiai; cum praesertim hic sit natura factus et ipsa sponte sua forte offensando semina rerum multimodis temere in cassum frustraque coacta tandem coluerunt ea quae coniecta repente magnarum rerum fierent exordia semper, terrai maris et caeli generisque animantum.	First of all, for us, in every direction all around, on either side, above and below, through the whole, there is no limit, as I have shown; the fact itself proclaims it aloud, and the nature of the deep shines clear. In no way, then, should it be thought likely, when space lies empty and infinite in every direction, and seeds in countless numbers, in a bottomless sum, fly about in many ways, driven by eternal motion, that this one world of lands and sky alone was created, and that all those bodies of matter outside do nothing— especially since this world was made by nature, as the seeds of things themselves, of their own accord, colliding by chance, driven together in many ways, at random, in vain and to no purpose, at last grew together—those which, suddenly cast together, were to become each time the beginnings of great things, of earth and sea and sky and the race of living creatures.
	/ quare etiam atque etiam talis fateare necesse est esse alios alibi congressus materiai, qualis hic est, avido complexu quem tenet aether.	/ Therefore again and again you must admit that there are elsewhere other gatherings of matter like this one, which the upper air holds in its greedy embrace.
2.1067	Praeterea cum materies est multa parata, cum locus est praesto nec res nec causa moratur ulla, geri debent ni mirum et confieri res. nunc et seminibus si tanta est copia, quantam enumerare aetas animantum non queat omnis,	Besides, when much matter is ready, when space is at hand, and no thing and no cause stands in the way, surely things must be carried out and brought to be. Now, if the store of seeds is so great

	LATIN	ENGLISH
	quis eadem natura manet, quae semina rerum conicere in loca quaeque queat simili ratione atque huc sunt coniecta, necesse est confiteare esse alios aliis terrarum in partibus orbis et varias hominum gentis et saecla ferarum.	that the whole lifetime of living creatures could not count it, and the same nature remains in them, able to throw the seeds of things together into every place in the same way as they have been thrown together here, you must admit that there are other worlds in other regions and various races of men and species of wild beasts.
2.1077	Huc accedit ut in summa res nulla sit una, unica quae gignatur et unica solaque crescat, quin aliquoius siet saecli permultaque eodem sint genere. in primis animalibus indice mente invenies sic montivagum genus esse ferarum, sic hominum geminam prolem, sic denique mutas squamigerum pecudes et corpora cuncta volantum. qua propter caelum simili ratione fatendumst terramque et solem, lunam mare cetera quae sunt, non esse unica, sed numero magis innumerali; quando quidem vitae depactus terminus alte tam manet haec et tam nativo corpore constant quam genus omne, quod his generatimst rebus abundans.	Add to this that in the sum of things there is no one thing that is born unique and grows unique and alone without belonging to some species, with very many of the same kind. Take living creatures first: with your mind as guide you will find that so it is with the mountain-roaming race of wild beasts, so with the twofold offspring of humankind, so, lastly, with the mute flocks of the scaly ones and all the bodies of flying things. Therefore, by the same reasoning, you must admit that sky and earth and sun, moon, sea, and all the rest that exist are not unique, but rather beyond all number, since a deeply fixed boundary of life awaits them just as surely, and they are made of a body that was born just as much as every species that abounds here in its kinds.
2.1090	Quae bene cognita si teneas, natura videtur libera continuo, dominis privata superbis, ipsa sua per se sponte omnia dis agere expers. nam pro sancta deum tranquilla pectora pace quae placidum degunt aevom vitamque serenam, quis regere immensi summam, quis habere profundi indu manu validas potis est moderanter habenas, quis pariter caelos omnis convertere et omnis ignibus aetheriis terras suffire feracis, omnibus inve locis esse omni tempore praesto, nubibus ut tenebras faciat caelique serena concutiat sonitu, tum fulmina mittat et aedis saepe suas disturbet et in deserta recedens saeviat exercens telum, quod saepe nocentes praeterit exanimatque indignos inque merentes?	If you hold these things well learned, nature is seen at once to be free, stripped of proud masters, doing all things by herself, of her own accord, without the gods. For—by the holy hearts of the gods, in tranquil peace, that pass a calm age and a serene life!— who can rule the sum of the immeasurable, who can hold in hand and steer the mighty reins of the deep, who can turn all the heavens alike and warm all the fruitful lands with fires from the upper air, or be present in every place at every time, to make darkness with clouds and shake the clear

LATIN	ENGLISH
	sky with thunder, then hurl lightning bolts, and often wreck his own temples, and, withdrawing into deserts, rage there, practicing with his weapon, which often passes by the guilty and kills the innocent and the undeserving?
2.1105 Multaque post mundi tempus genitale diemque primigenum maris et terrae solisque coortum addita corpora sunt extrinsecus, addita circum semina, quae magnum iaculando contulit omne, unde mare et terrae possent augescere et unde appareret spatium caeli domus altaque tecta tolleret a terris procul et consurgeret aer. nam sua cuique, locis ex omnibus, omnia plagis corpora distribuuntur et ad sua saecla recedunt, umor ad umorem, terreno corpore terra crescit et ignem ignes procudunt aetheraque ⟨aether⟩, donique ad extremum crescendi perfica finem omnia perduxit rerum natura creatrix; ut fit ubi nihilo iam plus est quod datur intra vitalis venas quam quod fluit atque recedit.	And after the birth-time of the world and the first day of sea and earth, and the rising of the sun, many bodies were added from outside, seeds added all around, which the great universe brought together by hurling, from which sea and lands could grow, and from which the dwelling of the sky could gain space and raise its lofty roof far from the earth, and the air could rise up. For by blows from every place all bodies are allotted, each to its own, and withdraw to their own kinds: moisture goes to moisture, earth grows with earthy body, fires forge fire, and ether ether, until nature, creator of things, the perfecter, has brought all things to the final limit of growth, as happens when no more is now given within the vital veins than flows out and departs.
/ omnibus hic aetas debet consistere rebus, hic natura suis refrenat viribus auctum. nam quae cumque vides hilaro grandescere adauctu paulatimque gradus aetatis scandere adultae, plura sibi adsumunt quam de se corpora mittunt, dum facile in venas cibus omnis inditur et dum non ita sunt late dispessa, ut multa remittant et plus dispendi faciant quam vescitur aetas. nam certe fluere atque recedere corpora rebus multa manus dandum est; sed plura accedere debent, donec alescendi summum tetigere cacumen. inde minutatim vires et robur adultum frangit et in partem peiorem liquitur aetas.	/ Here the life-span of all things must come to a halt; here nature reins in growth with her own strength. For whatever you see growing big with joyful increase and little by little climbing the steps of full-grown age takes into itself more bodies than it sends out from itself, as long as all the food is easily taken into the veins, and as long as it is not so widely spread out that it gives off much and spends more than its age feeds on. For certainly it must be granted that many bodies flow and depart from things; but more must come in until they have touched the topmost peak of growth.

	LATIN	ENGLISH
		From then on, little by little, age breaks their strength and full-grown vigor, and melts away into decline.
	/ quippe etenim quanto est res amplior, augmine adempto, et quo latior est, in cunctas undique partis plura modo dispargit et a se corpora mittit, nec facile in venas cibus omnis diditur ei nec satis est, pro quam largos exaestuat aestus, unde queat tantum suboriri ac subpeditare. iure igitur pereunt, cum rarefacta fluendo sunt et cum externis succumbunt omnia plagis, quando quidem grandi cibus aevo denique defit, nec tuditantia rem cessant extrinsecus ullam corpora conficere et plagis infesta domare.	/ For indeed, the larger a thing is once growth has ceased, and the broader, the more bodies it now scatters in every direction and sends out from itself; nor is the food easily spread through all its veins, nor is there enough, in proportion to the rich tides it pours out, from which as much can spring up anew and be supplied. Rightly, then, all things perish when they have been thinned by flowing out and when they succumb to blows from outside, since in great old age food at last runs short, and the bodies pounding from outside never cease to wear down any thing and subdue it with hostile blows.
2.1144	Sic igitur magni quoque circum moenia mundi expugnata dabunt labem putrisque ruinas; omnia debet enim cibus integrare novando et fulcire cibus, ⟨cibus⟩ omnia sustentare, ne quiquam, quoniam nec venae perpetiuntur quod satis est, neque quantum opus est natura ministrat.	So, then, the walls of the great world all around, too, will be stormed and collapse into crumbling ruins; for food must restore all things by renewing them, food must prop them up, food must sustain all things— in vain, since neither do the veins take in enough, nor does nature supply as much as is needed.
2.1150	Iamque adeo fracta est aetas effetaque tellus vix animalia parva creat, quae cuncta creavit saecla deditque ferarum ingentia corpora partu. haud, ut opinor, enim mortalia saecla superne aurea de caelo demisit funis in arva nec mare nec fluctus plangentis saxa crearunt, sed genuit tellus eadem quae nunc alit ex se. praeterea nitidas fruges vinetaque laeta sponte sua primum mortalibus ipsa creavit, ipsa dedit dulcis fetus et pabula laeta; quae nunc vix nostro grandescunt aucta labore, conterimusque boves et viris agricolarum, conficimus ferrum vix arvis suppeditati: usque adeo parcunt fetus augentque laborem.	And indeed, even now the age is broken, and the exhausted earth barely creates tiny creatures—she who created all species and gave birth to the huge bodies of wild beasts. For, I think, no golden rope let down the mortal species from heaven above onto the fields, nor did the sea and the waves that beat the rocks create them, but the same earth bore them that now feeds them from herself. Besides, the shining crops and lush vineyards she herself first created for mortals, of her own accord; she herself gave sweet fruits and lush pastures, which now scarcely grow large though increased by our labor; and we wear out oxen and the strength of farmers,

LATIN	ENGLISH
	we wear out the iron plow, and the fields barely provide for us: so sparing are they of their fruits, and so they increase our labor.[7]
/ iamque caput quassans grandis suspirat arator crebrius, in cassum magnos cecidisse labores, et cum tempora temporibus praesentia confert praeteritis, laudat fortunas saepe parentis. tristis item vetulae vitis sator atque ⟨vietae⟩ temporis incusat momen saeclumque fatigat, et crepat, antiquum genus ut pietate repletum perfacile angustis tolerarit finibus aevom, cum minor esset agri multo modus ante viritim; nec tenet omnia paulatim tabescere et ire ad capulum spatio aetatis defessa vetusto.	/ And now the old plowman shakes his head and sighs, more and more often, that his great labors have come to nothing, and when he compares present times with times past, he often praises his father's fortunes. Gloomy too, the planter of the old and shriveled vine blames the drift of the times and wearies the age with complaint, and grumbles that the men of old, full of piety, easily sustained their lives within narrow bounds, though each man's share of land was once much smaller; nor does he grasp that all things little by little waste away and go to the grave, worn out by the long span of their age.

7 The golden rope recalls the golden chain let down from heaven in Homer, *Iliad* 8.

Book III

Mind and soul
The soul is mortal, made of fine atoms; therefore death is nothing to us.

	LATIN	ENGLISH
3.1	E tenebris tantis tam clarum extollere lumen qui primus potuisti inlustrans commoda vitae, te sequor, o Graiae gentis decus, inque tuis nunc ficta pedum pono pressis vestigia signis, non ita certandi cupidus quam propter amorem quod te imitari aveo; quid enim contendat hirundo cycnis, aut quid nam tremulis facere artubus haedi consimile in cursu possint et fortis equi vis? tu, pater, es rerum inventor, tu patria nobis suppeditas praecepta, tuisque ex, inclute, chartis, floriferis ut apes in saltibus omnia libant, omnia nos itidem depascimur aurea dicta, aurea, perpetua semper dignissima vita. nam simul ac ratio tua coepit vociferari naturam rerum divina mente coorta diffugiunt animi terrores, moenia mundi discedunt.	You who first could raise so clear a light from such deep darkness, shedding light on the blessings of life, you I follow, glory of the Greek people, and in your deep-pressed tracks I now firmly set my own footprints, not so much eager to compete as out of love, because I long to imitate you; for why would a swallow vie with swans, or what could young goats on trembling limbs achieve in a race to match the strong horse's might? You, father, are the discoverer of things; you give us a father's precepts, and from your pages, famous one, as bees in flowery glades sip from everything, so we likewise feed on all your golden words— golden, and ever most worthy of everlasting life. For as soon as your reasoning begins to proclaim aloud the nature of things, sprung from a divine mind, the terrors of the mind scatter, the walls of the world open wide.
	totum video per inane geri res. apparet divum numen sedesque quietae, quas neque concutiunt venti nec nubila nimbis aspergunt neque nix acri concreta pruina cana cadens violat semper[que] innubilus aether integit et large diffuso lumine ridet: omnia suppeditat porro natura neque ulla res animi pacem delibat tempore in ullo. at contra nusquam apparent Acherusia templa, nec tellus obstat quin omnia dispiciantur, sub pedibus quae cumque infra per inane geruntur. his ibi me rebus quaedam divina voluptas percipit atque horror, quod sic natura tua vi tam manifesta patens ex omni parte retecta est.	I see things happening throughout the whole void. The majesty of the gods appears, and their quiet dwellings, which no winds shake, nor clouds spatter with rain, nor does snow, congealed by sharp frost, falling white, violate them; and an ever cloudless ether covers them and smiles with light spread wide. Nature, moreover, supplies them with everything, and nothing at any time nibbles away at their peace of mind. But on the other side, the regions of Acheron appear nowhere,

	LATIN	ENGLISH
		nor does the earth prevent everything from being seen clearly, whatever goes on below, beneath our feet, through the void. At these things a kind of divine pleasure takes hold of me, and a shudder, that nature by your power has been so plainly laid open and uncovered on every side.

THE FEAR OF DEATH

Fear of the underworld poisons life and drives greed, ambition and crime.

	LATIN	ENGLISH
3.31	Et quoniam docui, cunctarum exordia rerum qualia sint et quam variis distantia formis sponte sua volitent aeterno percita motu, quove modo possint res ex his quaeque creari, hasce secundum res animi natura videtur atque animae claranda meis iam versibus esse et metus ille foras praeceps Acheruntis agendus, funditus humanam qui vitam turbat ab imo omnia suffundens mortis nigrore neque ullam esse voluptatem liquidam puramque relinquit.	And since I have taught what the beginnings of all things are like, and how, differing in their varied shapes, they fly about of their own accord, driven by eternal motion, and in what way each thing can be created out of them, next after these matters, it seems, the nature of the mind and of the spirit must now be made clear in my verses, and that fear of Acheron driven headlong out of doors, which troubles human life from its very depths, suffusing everything with the blackness of death, and leaves no pleasure clear and pure.
	/ nam quod saepe homines morbos magis esse timendos infamemque ferunt vitam quam Tartara leti et se scire animi naturam sanguinis esse, aut etiam venti, si fert ita forte voluntas, nec prosum quicquam nostrae rationis egere, hinc licet advertas animum magis omnia laudis iactari causa quam quod res ipsa probetur. extorres idem patria longeque fugati conspectu ex hominum, foedati crimine turpi, omnibus aerumnis adfecti denique vivunt, et quo cumque tamen miseri venere parentant et nigras mactant pecudes et manibus divis inferias mittunt multoque in rebus acerbis acrius advertunt animos ad religionem.	/ For when men often declare that disease is more to be feared, and a life of disgrace, than the Tartarus of death, and that they know the nature of the mind is blood, or else wind, if their fancy happens so to incline, and that they have no need at all of our reasoning, you may observe from this that it is all tossed out for the sake of praise rather than because the thing itself is believed. These same men, exiled from their country and banished far from the sight of their fellows, defiled by some foul charge, afflicted in short with every misery, still live on, and wherever the wretches go, they make offerings to the dead, slaughter black cattle, and send down gifts

LATIN	ENGLISH
	to the divine shades, and in bitter times turn their minds far more keenly to religion.
/ quo magis in dubiis hominem spectare periclis convenit adversisque in rebus noscere qui sit; nam verae voces tum demum pectore ab imo eliciuntur [et] eripitur persona amanare. denique avarities et honorum caeca cupido, quae miseros homines cogunt transcendere fines iuris et inter dum socios scelerum atque ministros noctes atque dies niti praestante labore ad summas emergere opes, haec vulnera vitae non minimam partem mortis formidine aluntur.	/ So it is all the more fitting to watch a man in doubt and danger, and to learn in adversity what he is; for only then are true words drawn up from the depths of the heart; the mask is torn away, the reality re- mains. Then again, greed and the blind craving for office, which drive wretched men to overstep the bounds of right, and at times, as partners and agents of crime, to strive night and day with surpassing effort to rise to the height of wealth—these wounds of life are fed in no small part by the fear of death.[1]
/ turpis enim ferme contemptus et acris egestas semota ab dulci vita stabilique videtur et quasi iam leti portas cunctarier ante; unde homines dum se falso terrore coacti effugisse volunt longe longeque remosse, sanguine civili rem conflant divitiasque conduplicant avidi, caedem caede accumulantes, crudeles gaudent in tristi funere fratris et consanguineum mensas odere timentque. consimili ratione ab eodem saepe timore macerat invidia ante oculos illum esse potentem, illum aspectari, claro qui incedit honore, ipsi se in tenebris volvi caenoque queruntur. intereunt partim statuarum et nominis ergo.	/ For base contempt and bitter poverty, as a rule, seem far removed from a sweet and settled life, and to be loitering, as it were, already before the gates of death; and while men, driven by a false terror, wish to escape far from these and drive them far, far away, they amass a fortune from civil bloodshed and greedily double their riches, heaping slaughter on slaughter; cruelly they rejoice at a brother's sad funeral, and they hate and fear the tables of their kin. In just the same way, and often from the same fear, envy wastes them: that man before their eyes is powerful, that man is gazed at, who walks in the splendor of office, while they complain that they themselves wallow in darkness and mire. Some perish for the sake of statues and a name.
/ et saepe usque adeo, mortis formidine, vitae percipit humanos odium lucisque videndae, ut sibi consciscant maerenti pectore letum obliti fontem curarum hunc esse timorem: hunc vexare pudorem, hunc vincula amicitiai rumpere et in summa pietate evertere suadet: nam iam saepe homines patriam carosque parentis prodiderunt vitare Acherusia templa petentes. nam vel uti pueri trepidant atque omnia caecis	/ And often, through fear of death, so great a hatred of life and of seeing the light takes hold of human beings that with grieving hearts they bring death upon themselves, forgetting that this fear is the source of their cares: that this harries their sense of shame, this bursts the bonds of friendship, and, in short, urges them to overturn all piety:

1 The Latin text is corrupt at the end of 3.58; we follow the usual correction, "manet res" ("the reality remains").

	LATIN	ENGLISH
	in tenebris metuunt, sic nos in luce timemus inter dum, nihilo quae sunt metuenda magis quam quae pueri in tenebris pavitant finguntque futura. hunc igitur terrorem animi tenebrasque necessest non radii solis neque lucida tela diei discutiant, sed naturae species ratioque.	for often before now men have betrayed their country and their dear parents, seeking to escape the regions of Acheron. For just as children tremble and fear everything in blind darkness, so we in the light are afraid at times of things no more to be feared than what children shudder at in the dark and imagine will come. This terror of the mind, then, and this darkness must be dispelled not by the rays of the sun or the bright shafts of day, but by the face of nature and her reasoning.

MIND AND SPIRIT

Mind and spirit are bodily parts of a person, made of extremely fine particles.

	LATIN	ENGLISH
3.94	Primum animum dico, mentem quem saepe vocamus, in quo consilium vitae regimenque locatum est, esse hominis partem nihilo minus ac manus et pes atque oculei partes animantis totius extant. ... sensum animi certa non esse in parte locatum, verum habitum quendam vitalem corporis esse, harmoniam Grai quam dicunt, quod faciat nos vivere cum sensu, nulla cum in parte siet mens; ut bona saepe valetudo cum dicitur esse corporis, et non est tamen haec pars ulla valentis, sic animi sensum non certa parte reponunt; magno opere in quo mi diversi errare videntur.	First, I say that the mind, which we often call the understanding, in which the counsel and governance of life are lodged, is a part of a human being no less than hand and foot and eyes are parts of the whole living creature. ... that the sense of the mind is not lodged in any fixed part, but is a certain vital condition of the body, which the Greeks call harmony, because it makes us live with sensation, though the mind is in no part; just as good health is often said to belong to the body, and yet it is not any part of the healthy person, so they do not place the sense of the mind in a fixed part; and in this they seem to me to go badly astray.[2]
3.106	Saepe itaque, in promptu corpus quod cernitur, aegret, cum tamen ex alia laetamur parte latenti; et retro fit ubi contra sit saepe vicissim, cum miser ex animo laetatur corpore toto; non alio pacto quam si, pes cum dolet aegri, in nullo caput interea sit forte dolore.	So it often happens that the body, which is plain to see, is sick, while we are glad in some other, hidden part; and often, in turn, the reverse happens, when someone wretched in mind is glad in his whole body; just as when a sick man's foot is in pain,

2 The view that the soul is an "attunement" of the body, like the tuning of a lyre, was held by some Pythagoreans and by Aristotle's pupil Aristoxenus.

	LATIN	ENGLISH
		his head meanwhile may happen to feel no pain at all.
3.112	Praeterea molli cum somno dedita membra effusumque iacet sine sensu corpus honustum, est aliud tamen in nobis quod tempore in illo multimodis agitatur et omnis accipit in se laetitiae motus et curas cordis inanis.	Besides, when the limbs are given over to soft sleep and the heavy body lies sprawled without sensation, there is something else in us which at that time is stirred in many ways and takes into itself all the motions of joy and the heart's empty cares.
3.117	Nunc animam quoque ut in membris cognoscere possis esse neque harmonia corpus sentire solere, principio fit uti detracto corpore multo saepe tamen nobis in membris vita moretur.	Now, so that you may also recognize that the spirit too is in the limbs and that the body does not feel by harmony, first of all it happens that when much of the body is taken away, life often still lingers in our limbs.
3.121	Atque eadem rursum, cum corpora pauca caloris diffugere forasque per os est editus aër, deserit extemplo venas atque ossa relinquit; noscere ut hinc possis non aequas omnia partis corpora habere neque ex aequo fulcire salutem, sed magis haec, venti quae sunt calidique vaporis semina, curare in membris ut vita moretur. est igitur calor ac ventus vitalis in ipso corpore, qui nobis moribundos deserit artus. quapropter quoniam est animi natura reperta atque animae quasi pars hominis, redde harmoniai nomen, ad organicos alto delatum Heliconi, sive aliunde ipsi porro traxere et in illam transtulerunt, proprio quae tum res nomine egebat. quidquid [id] est, habeant: tu cetera percipe dicta.	And again, that same life, when a few bodies of heat have fled and air has been breathed out through the mouth, at once deserts the veins and leaves the bones; so that from this you may learn that not all bodies play an equal part or equally uphold our well-being, but that these rather, which are the seeds of wind and warm heat, see to it that life lingers in the limbs. There is, then, a vital heat and wind in the body itself, which deserts our limbs as we die. Therefore, since the nature of mind and spirit has been found to be, as it were, a part of a human being, give back the name of harmony, brought down to the musicians from lofty Helicon, or else they themselves drew it from somewhere else and carried it over to that thing which at the time lacked a name of its own. Whatever it is, let them keep it: you, hear the rest of my words.
3.136	Nunc animum atque animam dico coniuncta teneri inter se atque unam naturam conficere ex se, sed caput esse quasi et dominari in corpore toto consilium, quod nos animum mentemque vocamus. idque situm media regione in pectoris haeret. hic exultat enim pavor ac metus, haec loca circum laetitiae mulcent: hic ergo mens animusquest.	Now I say that mind and spirit are held joined together and make up one nature between them, but that the head, as it were, which rules in the whole body, is the counsel that we call mind and understanding. And this stays lodged in the middle region of the

	LATIN	ENGLISH
	cetera pars animae per totum dissita corpus paret et ad numen mentis momenque movetur. idque sibi solum per se sapit et sibi gaudet, cum neque res animam neque corpus commovet una.	breast. For here fear and dread leap up, around these parts joys caress us: here, then, are understanding and mind. The rest of the spirit, scattered through the whole body, obeys, and moves at the nod and impulse of the mind. The mind alone has thoughts by itself and for itself, and rejoices for itself, when nothing moves either spirit or body at the same time.
	/ et quasi, cum caput aut oculus temptante dolore laeditur in nobis, non omni concruciamur corpore, sic animus nonnumquam laeditur ipse laetitiaque viget, cum cetera pars animai per membra atque artus nulla novitate cietur; verum ubi vementi magis est commota metu mens, consentire animam totam per membra videmus sudoresque ita palloremque existere toto corpore et infringi linguam vocemque aboriri, caligare oculos, sonere auris, succidere artus, denique concidere ex animi terrore videmus saepe homines; facile ut quivis hinc noscere possit esse animam cum animo coniunctam, quae cum animi [vi] percussa est, exim corpus propellit et icit.	/ And just as, when the head or an eye is hurt in us by an attack of pain, we are not tormented in the whole body, so the mind is sometimes hurt by itself or flourishes with joy, when the rest of the spirit through the limbs and joints is stirred by nothing new; but when the mind is shaken by some quite violent fear, we see the whole spirit share the feeling throughout the limbs, and sweat and pallor break out, accordingly, over the whole body, the tongue falters and the voice dies away, the eyes grow dim, the ears ring, the limbs give way; in short, we see that men often collapse from terror of mind; so that anyone may easily learn from this that the spirit is joined with the mind, and when it is struck by the force of the mind, it then drives and strikes the body.
3.161	Haec eadem ratio naturam animi atque animai corpoream docet esse; ubi enim propellere membra, corripere ex somno corpus mutareque vultum atque hominem totum regere ac versare videtur, quorum nil fieri sine tactu posse videmus nec tactum porro sine corpore, nonne fatendumst corporea natura animum constare animamque? praeterea pariter fungi cum corpore et una consentire animum nobis in corpore cernis. si minus offendit vitam vis horrida teli ossibus ac nervis disclusis intus adacta, at tamen insequitur languor terraeque petitus suavis et in terra mentis qui gignitur aestus	This same reasoning shows that the nature of mind and spirit is bodily; for when it is seen to drive the limbs, to snatch the body from sleep, to change the face, and to steer and turn the whole human being— none of which we see can happen without touch, nor touch, in turn, without body—must we not admit that mind and spirit are made of bodily nature? Besides, you see that the mind is affected along with the body and shares its feelings with it in our body. If the dread force of a weapon falls short of des-

	LATIN	ENGLISH
	inter dumque quasi exsurgendi incerta voluntas. ergo corpoream naturam animi esse necessest, corporeis quoniam telis ictuque laborat.	troying life, though driven deep inside, splitting bones and sinews, still there follows a faintness, and a pleasant sinking to the ground, and, on the ground, a turmoil that arises in the mind, and now and then a wavering wish, as it were, to rise. Therefore the nature of the mind must be bodily, since it suffers from bodily weapons and blows.
3.177	Is tibi nunc animus quali sit corpore et unde constiterit pergam rationem reddere dictis. principio esse aio persuptilem atque minutis perquam corporibus factum constare. id ita esse hinc licet advertas animum, ut pernoscere possis.	Now, of what kind of body this mind is made, and from what it is composed, I shall go on to give you an account in words. First of all, I say that it is extremely fine and made of exceedingly minute bodies. That this is so, you may note from what follows, and so come to know it well.
3.182	Nil adeo fieri celeri ratione videtur, quam si mens fieri proponit et inchoat ipsa; ocius ergo animus quam res se perciet ulla, ante oculos quorum in promptu natura videtur. at quod mobile tanto operest, constare rutundis perquam seminibus debet perquamque minutis, momine uti parvo possint inpulsa moveri. namque movetur aqua et tantillo momine flutat, quippe volubilibus parvisque creata figuris. at contra mellis constantior est natura et pigri latices magis et cunctantior actus: haeret enim inter se magis omnis materiai copia, ni mirum quia non tam levibus extat corporibus neque tam suptilibus atque rutundis.	Nothing is seen to happen so swiftly as what the mind proposes should happen and itself begins; the mind, then, sets itself in motion faster than any of the things whose nature we see plainly before our eyes. But what is so exceptionally mobile must consist of seeds exceedingly round and exceedingly minute, so that they can be moved when struck by a small impulse. For water moves and flows at the slightest impulse, being made, of course, of small and rolling shapes. But the nature of honey, by contrast, is more cohesive, its liquid more sluggish and its movement slower: for the whole mass of its matter clings more closely together, no doubt because it is not made of bodies so smooth, nor so fine and round.
	/ namque papaveris aura potest suspensa levisque cogere ut ab summo tibi diffluat altus acervus, at contra lapidum coniectum spicarumque noenu potest. igitur parvissima corpora pro quam et levissima sunt, ita mobilitate fruuntur; at contra quae cumque magis cum pondere magno	/ For a light breath of air, hanging still, can make a deep heap of poppy seed slide down from the top before your eyes, but a pile of stones or of ears of grain, by contrast, it cannot. So bodies enjoy mobility in proportion

LATIN	ENGLISH
asperaque inveniuntur, eo stabilita magis sunt. nunc igitur quoniamst animi natura reperta mobilis egregie, perquam constare necessest corporibus parvis et levibus atque rutundis. quae tibi cognita res in multis, o bone, rebus utilis invenietur et opportuna cluebit.	as they are smallest and lightest; while, on the other hand, the more weight and roughness things are found to have, the more firmly settled they are. Now then, since the nature of the mind has been found to be exceptionally mobile, it must consist of bodies that are exceedingly small and smooth and round. This fact, once you know it, my good friend, will prove useful to you in many matters and will be counted timely.
3.208 Haec quoque res etiam naturam dedicat eius, quam tenui constet textura quamque loco se contineat parvo, si possit conglomerari, quod simul atque hominem leti secura quies est indepta atque animi natura animaeque recessit, nil ibi libatum de toto corpore cernas ad speciem, nihil ad pondus: mors omnia praestat, vitalem praeter sensum calidumque vaporem. ergo animam totam perparvis esse necessest seminibus nexam per venas viscera nervos, qua tenus, omnis ubi e toto iam corpore cessit, extima membrorum circumcaesura tamen se incolumem praestat nec defit ponderis hilum.	This fact, too, declares its nature, how fine the texture it is made of, and in how small a space it would be contained if it could be gathered into a ball: that as soon as the carefree rest of death has taken hold of a man, and the nature of mind and spirit has departed, you can see nothing taken away from the whole body in appearance, nothing in weight: death leaves everything intact except vital sensation and warm heat. Therefore the whole spirit must be made of very small seeds, woven through veins, flesh, and sinews, inasmuch as, when it has all left the whole body, the outer contour of the limbs still keeps itself intact, and not a scrap of weight is missing.
/ quod genus est, Bacchi cum flos evanuit aut cum spiritus unguenti suavis diffugit in auras aut aliquo cum iam sucus de corpore cessit; nil oculis tamen esse minor res ipsa videtur propterea neque detractum de pondere quicquam, ni mirum quia multa minutaque semina sucos efficiunt et odorem in toto corpore rerum. quare etiam atque etiam mentis naturam animaeque scire licet perquam pauxillis esse creatam seminibus, quoniam fugiens nil ponderis aufert.	/ It is just as when the bouquet of Bacchus has vanished, or when the sweet breath of a perfume has scattered into the air, or when flavor has gone from some substance; yet the thing itself seems no smaller to the eye on that account, nor has anything been taken from its weight, no doubt because many minute seeds make up the flavors and the scent throughout the whole body of things. Therefore, again and again, you may know that the nature of mind and spirit is made of exceedingly tiny seeds, since in fleeing it carries off no weight.

	LATIN	ENGLISH
3.231	Nec tamen haec simplex nobis natura putanda est. tenvis enim quaedam moribundos deserit aura mixta vapore, vapor porro trahit aëra secum; nec calor est quisquam, cui non sit mixtus et aër; rara quod eius enim constat natura, necessest aëris inter eum primordia multa moveri. iam triplex animi est igitur natura reperta; nec tamen haec sat sunt ad sensum cuncta creandum, nil horum quoniam recipit mens posse creare sensiferos motus, quae denique mente volutat. quarta quoque his igitur quaedam natura necessest adtribuatur; east omnino nominis expers; qua neque mobilius quicquam neque tenvius extat nec magis e parvis et levibus ex elementis; sensiferos motus quae didit prima per artus.	Yet we must not think this nature is simple. For a thin breath, mixed with heat, deserts the dying, and heat in turn draws air along with it; nor is there any heat that does not have air mixed in; for since its nature is loose in texture, many first beginnings of air must move within it. So the nature of the mind has now been found to be threefold; and yet these are not enough, all together, to create sensation, since the mind does not admit that any of them can create the sense-bearing motions, or, in the end, what one turns over in the mind. So a certain fourth nature must be added to these as well; it is altogether without a name; nothing exists more mobile or finer than it, or made of smaller and smoother elements; it is the first to distribute the sense-bearing motions through the limbs.
	/ prima cietur enim, parvis perfecta figuris, inde calor motus et venti caeca potestas accipit, inde aër, inde omnia mobilitantur: concutitur sanguis, tum viscera persentiscunt omnia, postremis datur ossibus atque medullis sive voluptas est sive est contrarius ardor. nec temere huc dolor usque potest penetrare neque acre permanare malum, quin omnia perturbentur usque adeo [ut] vitae desit locus atque animai diffugiant partes per caulas corporis omnis. sed plerumque fit in summo quasi corpore finis motibus: hanc ob rem vitam retinere valemus.	/ For it is the first to be stirred, made as it is of small shapes; then heat takes up the motions, and the unseen power of wind, then air; then everything is set in motion: the blood is shaken, then all the flesh feels it through and through; last, it is passed to the bones and the marrow, whether it is pleasure or the opposite burning. Nor can pain lightly penetrate this far, or a sharp evil seep all through, without throwing everything into confusion, so far that there is no room left for life, and the parts of the spirit scatter through all the pores of the body. But for the most part a limit is set, as it were, at the surface of the body to these motions: and that is why we manage to keep our life.
3.258	Nunc ea quo pacto inter sese mixta quibusque compta modis vigeant rationem reddere aventem abstrahit invitum patrii sermonis egestas; sed tamen, ut potero summatim attingere, tangam. inter enim cursant primordia principiorum motibus inter se, nihil ut secernier unum possit nec spatio fieri divisa potestas,	Now, how these are mixed with one another, and in what ways arranged so that they thrive, I am eager to explain, but the poverty of my native tongue drags me back against my will; still, as far as I can touch on it in summary, I shall

LATIN	ENGLISH
sed quasi multae vis unius corporis extant. quod genus in quovis animantum viscere volgo est odor et quidam color et sapor, et tamen ex his omnibus est unum perfectum corporis augmen, sic calor atque aër et venti caeca potestas mixta creant unam naturam et mobilis illa vis, initum motus ab se quae dividit ollis, sensifer unde oritur primum per viscera motus.	touch on it. For the first beginnings of the elements run in and out among one another with their motions, so that no single one can be separated off nor any power be set apart by space, but they are, as it were, the many forces of a single body. Just as in the flesh of any living creature, generally, there is smell and a certain color and taste, and yet from all these is made up one complete bulk of body, so heat and air and the unseen power of wind, mixed together, create one nature, along with that mobile force which distributes to them from itself the beginning of motion, from which the sense-bearing motion first arises through the flesh.
/ nam penitus prorsum latet haec natura subestque nec magis hac infra quicquam est in corpore nostro atque anima est animae proporro totius ipsa. quod genus in nostris membris et corpore toto mixta latens animi vis est animaeque potestas, corporibus quia de parvis paucisque creatast, sic tibi nominis haec expers vis, facta minutis corporibus, latet atque animae quasi totius ipsa proporrost anima et dominatur corpore toto. consimili ratione necessest ventus et aër et calor inter se vigeant commixta per artus atque aliis aliud subsit magis emineatque, ut quiddam fieri videatur ab omnibus unum, ni calor ac ventus seorsum seorsumque potestas aëris interemant sensum diductaque solvant.	/ For this nature lies hidden deep down, far below, and there is nothing in our body that lies deeper than it, and it is itself, moreover, the very spirit of the whole spirit. Just as in our limbs and throughout the body the force of mind and power of spirit lie hidden, mixed in, because they are made of bodies small and few, so, you see, this nameless force, made of minute bodies, lies hidden, and is, as it were, itself the spirit of the whole spirit, and rules in the whole body. In the same way, wind and air and heat must thrive mingled together through the limbs, and one lie beneath the others, another stand out more, so that one single thing may seem to be made from them all, lest heat and wind apart, and the power of air apart, should destroy sensation by pulling it apart and dissolving it.
/ est etiam calor ille animo, quem sumit, in ira cum fervescit et ex oculis micat acrius ardor; est et frigida multa, comes formidinis, aura, quae ciet horrorem membris et concitat artus; est etiam quoque pacati status aëris ille,	/ The mind has, too, that heat which it takes on when in anger it boils up and fire flashes more fiercely from the eyes; there is also much cold wind, the companion of

LATIN	ENGLISH
pectore tranquillo fit qui voltuque sereno. sed calidi plus est illis quibus acria corda iracundaque mens facile effervescit in ira, quo genere in primis vis est violenta leonum, pectora qui fremitu rumpunt plerumque gementes nec capere irarum fluctus in pectore possunt. at ventosa magis cervorum frigida mens est et gelidas citius per viscera concitat auras, quae tremulum faciunt membris existere motum.	fear, which stirs shuddering in the limbs and sets the body shaking; and there is also that state of calm, still air which comes with a tranquil breast and a serene face. But there is more heat in those whose hearts are fierce and whose angry mind readily boils over in rage; of this kind, above all, is the violent force of lions, who often burst their breasts with roaring and growling and cannot contain the waves of their anger in their breasts. But the cold mind of deer has more wind in it, and more quickly stirs icy breezes through the flesh, which make a trembling motion start up in the limbs.
/ at natura boum placido magis aëre vivit nec nimis irai fax umquam subdita percit fumida, suffundens caecae caliginis umbra, nec gelidis torpet telis perfixa pavoris; interutrasque sitast cervos saevosque leones. sic hominum genus est: quamvis doctrina politos constituat pariter quosdam, tamen illa relinquit naturae cuiusque animi vestigia prima. nec radicitus evelli mala posse putandumst, quin proclivius hic iras decurrat ad acris, ille metu citius paulo temptetur, at ille tertius accipiat quaedam clementius aequo. inque aliis rebus multis differre necessest naturas hominum varias moresque sequacis; quorum ego nunc nequeo caecas exponere causas nec reperire figurarum tot nomina quot sunt principiis, unde haec oritur variantia rerum.	/ But the nature of oxen lives more by calm air; nor does the smoky torch of anger, set beneath it, ever rouse it too much, suffusing it with the shade of blind darkness, nor is it numbed, pierced through by the icy shafts of fear; it is placed between the two, deer and fierce lions. So it is with the human race: though training may render some equally polished, still it leaves behind the first traces of each mind's nature. Nor must we think that faults can be torn out by the roots, so that one man will not run too readily into fierce anger, another be assailed a little too quickly by fear, and a third accept some things more meekly than is right. And in many other ways the varied natures of human beings and the characters that follow from them must differ; whose hidden causes I cannot now set out, nor find names for as many shapes as there are among the beginnings, from which this variety of things arises.
/ illud in his rebus video firmare potesse, usque adeo naturarum vestigia linqui parvola, quae nequeat ratio depellere nobis, ut nihil inpediat dignam dis degere vitam.	/ This much in these matters I see I can affirm: that the traces of our natures left behind are so very slight, those that reason cannot drive out of us,

	LATIN	ENGLISH
		that nothing prevents our living a life worthy of the gods.
3.323	Haec igitur natura tenetur corpore ab omni ipsaque corporis est custos et causa salutis; nam communibus inter se radicibus haerent nec sine pernicie divelli posse videntur. quod genus e thuris glaebis evellere odorem haud facile est, quin intereat natura quoque eius, sic animi atque animae naturam corpore toto extrahere haut facile est, quin omnia dissoluantur. inplexis ita principiis ab origine prima inter se fiunt consorti praedita vita, nec sibi quaeque sine alterius vi posse videtur corporis atque animi seorsum sentire potestas, sed communibus inter eas conflatur utrimque motibus accensus nobis per viscera sensus.	This nature, then, is held in by the whole body, and is itself the body's guardian and the cause of its well-being; for they cling together by common roots and clearly cannot be torn apart without destruction. Just as it is not easy to tear the scent out of lumps of incense without its nature perishing too, so it is not easy to draw the nature of mind and spirit out of the whole body without everything dissolving. With their beginnings so interwoven from their first origin, they come into being endowed with a shared life, and neither, it seems, without the force of the other, can the power of body or of mind feel by itself, apart, but by shared motions on both sides between them sensation is kindled and fanned in us through the flesh.
3.337	Praeterea corpus per se nec gignitur umquam nec crescit neque post mortem durare videtur. non enim, ut umor aquae dimittit saepe vaporem, qui datus est, neque ea causa convellitur ipse, sed manet incolumis, non, inquam, sic animai discidium possunt artus perferre relicti, sed penitus pereunt convulsi conque putrescunt. ex ineunte aevo sic corporis atque animai mutua vitalis discunt contagia motus, maternis etiam membris alvoque reposta, discidium [ut] nequeat fieri sine peste maloque; ut videas, quoniam coniunctast causa salutis, coniunctam quoque naturam consistere eorum.	Besides, the body by itself is never born, nor grows, nor, clearly, lasts after death. For it is not as with the liquid of water, which often gives off the heat that has been put into it, yet is not torn apart for that reason but remains intact—not so, I say, can the abandoned limbs endure the separation of the spirit, but they perish utterly, torn apart, and rot away. So from the start of life the body and the spirit, through mutual contact, learn the motions of life, even while stored in the mother's limbs and womb, so that their separation cannot happen without ruin and harm; so that you may see, since the cause of their well-being is joined, that their nature too is joined.
3.350	Quod super est, siquis corpus sentire refutat atque animam credit permixtam corpore toto suscipere hunc motum quem sensum nominitamus,	What remains: if anyone denies that the body feels and believes that the spirit, mixed through the whole body,

	LATIN	ENGLISH
	vel manifestas res contra verasque repugnat. quid sit enim corpus sentire quis adferet umquam, si non ipsa palam quod res dedit ac docuit nos? 'at dimissa anima corpus caret undique sensu.' perdit enim quod non proprium fuit eius in aevo multaque praeterea perdit quom expellitur aevo.	takes on this motion which we call sensation, he fights against things that are both plain and true. For who will ever explain what it is for the body to feel, if not what the fact itself has plainly shown and taught us? “But when the spirit has gone, the body is wholly without sensation.” Yes, for it loses what was never its own in life, and much else besides it loses when it is driven out of life.
3.359	Dicere porro oculos nullam rem cernere posse, sed per eos animum ut foribus spectare reclusis, difficilest, contra cum sensus ducat eorum; sensus enim trahit atque acies detrudit ad ipsas, fulgida praesertim cum cernere saepe nequimus, lumina luminibus quia nobis praepediuntur. quod foribus non fit; neque enim, qua cernimus ipsi, ostia suscipiunt ullum reclusa laborem. praeterea si pro foribus sunt lumina nostra, iam magis exemptis oculis debere videtur cernere res animus sublatis postibus ipsis.	Then again, to say that the eyes can see nothing, but that the mind looks out through them as through open doors, is hard, since their very sense leads us the other way; for sense drags us and thrusts us right up to the eyes’ own sight, especially since we often cannot see bright things, because our eyes are blinded by the light. That does not happen with doors; for the open doorways through which we ourselves look suffer no strain. Besides, if our eyes serve as doors, then surely, with the eyes taken out, the mind ought to see things better, now that the very doorposts are removed.
3.370	Illud in his rebus nequaquam sumere possis, Democriti quod sancta viri sententia ponit, corporis atque animi primordia singula primis adposita alternis, variare ac nectere membra. nam cum multo sunt animae elementa minora quam quibus e corpus nobis et viscera constant, tum numero quoque concedunt et rara per artus dissita sunt, dum taxat ut hoc promittere possis, quantula prima queant nobis iniecta ciere corpora sensiferos motus in corpore, tanta intervalla tenere exordia prima animai.	

	LATIN	ENGLISH
		In these matters you can by no means accept what the venerable doctrine of Democritus lays down: that the first beginnings of body and mind, set singly side by side, alternate and so bind the limbs together. For not only are the elements of the spirit much smaller than those of which our body and flesh are made, but they are also fewer in number, and are scattered sparsely through the limbs, so that you can at least guarantee this: that however small the first bodies are that, cast upon us, can stir sense-bearing motions in the body, so great are the intervals that the first beginnings of the spirit keep.[3]
	/ nam neque pulveris inter dum sentimus adhaesum corpore nec membris incussam sidere cretam, nec nebulam noctu neque arani tenvia fila obvia sentimus, quando obretimur euntes, nec supera caput eiusdem cecidisse vietam vestem nec plumas avium papposque volantis, qui nimia levitate cadunt plerumque gravatim, nec repentis itum cuiusvis cumque animantis sentimus nec priva pedum vestigia quaeque, corpore quae in nostro culices et cetera ponunt. usque adeo prius est in nobis multa ciendum quam primordia sentiscant concussa animai, semina corporibus nostris inmixta per artus, et quam in his intervallis tuditantia possint concursare coire et dissultare vicissim.	/ For we do not at times feel dust clinging to the body, or chalk scattered on the limbs settling there, nor do we feel the mist at night, or the fine threads of a spider in our way, when we are caught in them as we walk, nor its shriveled web fallen over our head, nor birds' feathers or flying thistledown, which from their extreme lightness mostly fall slowly; nor do we feel the passage of every creeping creature, nor each separate footprint that gnats and the like set down on our body. So many things must first be stirred in us before the first beginnings of the spirit, shaken, begin to feel, those seeds mixed through the limbs with the bodies of our frame, and before, pounding across these intervals, they can rush together, unite, and leap apart in turn.
3.396	Et magis est animus vitai claustra coërcens et dominantior ad vitam quam vis animai. nam sine mente animoque nequit residere per artus temporis exiguam partem pars ulla animai,	And the mind does more to keep the bolts of life shut fast, and has more sovereignty over life, than the force of the spirit. For without understanding and mind no part of

3 Democritus of Abdera (5th century BC), who with Leucippus founded the atomic theory that Epicurus took over and revised.

	LATIN	ENGLISH
	sed comes insequitur facile et discedit in auras et gelidos artus in leti frigore linquit.	the spirit can stay in the limbs for even the smallest part of time, but it follows readily in the mind's train, departs into the air, and leaves the limbs icy in the chill of death.
	/ at manet in vita cui mens animusque remansit, quamvis est circum caesis lacer undique membris; truncus adempta anima circum membrisque remota vivit et aetherias vitalis suscipit auras; si non omnimodis, at magna parte animai privatus, tamen in vita cunctatur et haeret; ut, lacerato oculo circum si pupula mansit incolumis, stat cernundi vivata potestas, dum modo ne totum corrumpas luminis orbem et circum caedas aciem solamque relinquas; id quoque enim sine pernicie non fiet eorum. at si tantula pars oculi media illa peresa est, occidit extemplo lumen tenebraeque secuntur, incolumis quamvis alioqui splendidus orbis. hoc anima atque animus vincti sunt foedere semper.	/ But one in whom understanding and mind remain stays alive, though mangled all over, his limbs cut away around him; the trunk, with the spirit taken from around it and the limbs removed, lives on and draws in the life-giving air of heaven; robbed, if not wholly, at least of a great part of the spirit, it still lingers on in life and holds fast; just as, when the eye is lacerated all around, if the pupil has remained unharmed, the power of sight stands firm and alive, so long as you do not ruin the whole orb of the eye and cut all around the pupil and leave it alone; for that too will not happen without their ruin. But if that tiny part in the middle of the eye is eaten away, the light at once goes out and darkness follows, however unharmed the bright orb may otherwise be. By this bond spirit and mind are forever tied.

THE SOUL IS MORTAL

Many arguments show that mind and spirit are born with the body and die with it.

	LATIN	ENGLISH
3.417	Nunc age, nativos animantibus et mortalis esse animos animasque levis ut noscere possis, conquisita diu dulcique reperta labore digna tua pergam disponere carmina vita. tu fac utrumque uno subiungas nomine eorum atque animam verbi causa cum dicere pergam, mortalem esse docens, animum quoque dicere credas, qua tenus est unum inter se coniunctaque res est.	Now come: so that you may learn that the minds and light spirits of living creatures are born and are mortal, verses long sought out and found with sweet toil, worthy of your life, I shall go on to set out. Make sure you yoke both of them under a single name, and when, for instance, I go on to speak of the spirit, teaching that it is mortal, believe that I speak of the mind too, inasmuch as they are one and form a single joined thing.
3.425	Principio quoniam tenuem constare minutis corporibus docui multoque minoribus esse	First of all, since I have shown that it is fine and consists of minute

LATIN	ENGLISH
principiis factam quam liquidus umor aquai aut nebula aut fumus —; nam longe mobilitate praestat et a tenui causa magis icta movetur, quippe ubi imaginibus fumi nebulaeque movetur; quod genus in somnis sopiti ubi cernimus alte exhalare vaporem altaria ferreque fumum; nam procul haec dubio nobis simulacra geruntur — nunc igitur quoniam quassatis undique vasis diffluere umorem et laticem discedere cernis, et nebula ac fumus quoniam discedit in auras, crede animam quoque diffundi multoque perire ocius et citius dissolvi in corpora prima, cum semel ex hominis membris ablata recessit; quippe etenim corpus, quod vas quasi constitit eius, cum cohibere nequit conquassatum ex aliqua re ac rarefactum detracto sanguine venis, aëre qui credas posse hanc cohiberier ullo, corpore qui nostro rarus magis incohibens sit?	bodies, and is made of beginnings much smaller than the flowing liquid of water or mist or smoke—for it far surpasses them in mobility and is moved when struck by a slighter cause, seeing that it is moved even by images of smoke and mist; as when, lulled in sleep, we see altars breathe out steam on high and send up smoke; for without doubt these are images that come to us — now, then, since you see that when vessels are shattered the liquid flows away on every side and the water runs off, and since mist and smoke scatter into the air, believe that the spirit too is dispersed and perishes much more quickly, and is sooner dissolved into its first bodies, once it has been taken from a man's limbs and has departed; for indeed, since the body, which was, as it were, its vessel, cannot hold it in when shaken apart by some cause and made porous by blood drawn from the veins, how could you believe it could be held in by any air, which is more porous than our body and less able to hold it?
3.445 Praeterea gigni pariter cum corpore et una crescere sentimus pariterque senescere mentem. nam vel ut infirmo pueri teneroque vagantur corpore, sic animi sequitur sententia tenvis. inde ubi robustis adolevit viribus aetas, consilium quoque maius et auctior est animi vis. post ubi iam validis quassatum est viribus aevi corpus et obtusis ceciderunt viribus artus, claudicat ingenium, delirat lingua [labat] mens, omnia deficiunt atque uno tempore desunt. ergo dissolui quoque convenit omnem animai naturam, ceu fumus, in altas aëris auras; quando quidem gigni pariter pariterque videmus crescere et, [ut] docui, simul aevo fessa fatisci.	Besides, we perceive that the mind is born along with the body, grows up with it, and grows old with it. For just as children toddle about with a weak and tender body, so a slender judgment of mind goes with it. Then, when their age has matured into sturdy strength, their counsel too is greater and the strength of their mind increased. Later, when the body has been shaken by the mighty strength of time and the limbs have sunk down, their strength blunted, the wit limps, the tongue raves, the mind totters, everything fails and gives out at one and the same time. It follows, then, that the whole nature of the spirit

	LATIN	ENGLISH
		too is dissolved, like smoke, into the high breezes of the air; since we see it born together with the body and together with it grow, and, as I have shown, weary with age, fall apart at the same time.
3.459	Huc accedit uti videamus, corpus ut ipsum suscipere inmanis morbos durumque dolorem, sic animum curas acris luctumque metumque; quare participem leti quoque convenit esse. quin etiam morbis in corporis avius errat saepe animus; dementit enim deliraque fatur, inter dumque gravi lethargo fertur in altum aeternumque soporem oculis nutuque cadenti; unde neque exaudit voces nec noscere voltus illorum potis est, ad vitam qui revocantes circum stant lacrimis rorantes ora genasque. quare animum quoque dissolui fateare necessest, quandoquidem penetrant in eum contagia morbi; nam dolor ac morbus leti fabricator uterquest, multorum exitio perdocti quod sumus ante.	Add to this that we see that, just as the body itself is subject to monstrous diseases and harsh pain, so the mind is subject to sharp cares, grief, and fear; so it is fitting that it should share in death as well. What is more, in the body's diseases the mind often wanders off the path; for it loses its reason and talks nonsense, and at times, in a heavy lethargy, it is carried off into a deep and endless sleep, with drooping eyes and nodding head, from which it neither hears voices nor can recognize the faces of those who, calling it back to life, stand around with tears bedewing their faces and cheeks. So you must admit that the mind too is dissolved, since the contagions of disease penetrate into it; for pain and disease are both craftsmen of death, as we have been well taught before now by the destruction of many.
	/ [et quoniam mentem sanari corpus ut aegrum] [et pariter mentem sanari corpus inani] denique cor, hominem cum vini vis penetravit acris et in venas discessit diditus ardor, consequitur gravitas membrorum, praepediuntur crura vacillanti, tardescit lingua, madet mens, nant oculi, clamor singultus iurgia gliscunt, et iam cetera de genere hoc quae cumque secuntur, cur ea sunt, nisi quod vehemens violentia vini conturbare animam consuevit corpore in ipso? at quae cumque queunt conturbari inque pediri, significant, paulo si durior insinuarit causa, fore ut pereant aevo privata futuro.	/ [and since the mind, like a sick body, can be healed] [and equally that the mind is healed, the body in vain] Then again, why is it that when the fierce strength of wine has entered a man and its heat has spread and passed into his veins, there follows a heaviness of the limbs, his legs are hobbled as he staggers, the tongue grows slow, the mind is sodden, the eyes swim, shouting, hiccups, and quarrels swell, and all the other things of this kind that follow— why do these things happen, unless the vehement violence of wine is accustomed to throw the spirit into confusion within the body itself? But whatever things can be confused and hindered

	LATIN	ENGLISH
		show that, if some slightly harsher cause worked its way in, they would perish, robbed of their future life.[4]
3.487	Quin etiam subito vi morbi saepe coactus ante oculos aliquis nostros, ut fulminis ictu, concidit et spumas agit, ingemit et tremit artus, desipit, extentat nervos, torquetur, anhelat inconstanter, et in iactando membra fatigat, ni mirum quia vis morbi distracta per artus turbat agens animam, spumans [ut] in aequore salso ventorum validis fervescunt viribus undae. exprimitur porro gemitus, quia membra dolore adficiuntur et omnino quod semina vocis eliciuntur et ore foras glomerata feruntur qua quasi consuerunt et sunt munita viai. desipientia fit, quia vis animi atque animai conturbatur et, ut docui, divisa seorsum disiectatur eodem illo distracta veneno.	What is more, often someone, seized suddenly by the force of a disease, before our very eyes, as though by a stroke of lightning, falls down and foams at the mouth, groans and trembles in his limbs, loses his wits, stiffens his sinews, writhes, pants fitfully, and wears out his limbs with thrashing, no doubt because the force of the disease, spread through the limbs, drives and churns the spirit, as on the salt sea, foaming, the waves seethe under the mighty strength of the winds. A groan, moreover, is forced out, because the limbs are racked with pain, and above all because the seeds of the voice are driven out and carried forth from the mouth in a mass, along what is, as it were, their usual and well-built road. Loss of reason comes about because the force of mind and spirit is thrown into confusion and, as I have shown, divided apart, is torn asunder and scattered by that same poison.
	/ inde ubi iam morbi reflexit causa, reditque in latebras acer corrupti corporis umor, tum quasi vaccillans primum consurgit et omnis paulatim redit in sensus animamque receptat. haec igitur tantis ubi morbis corpore in ipso iactentur miserisque modis distracta laborent, cur eadem credis sine corpore in aëre aperto cum validis ventis aetatem degere posse?	/ Then, when the cause of the disease has turned back, and the sharp humor of the corrupted body has returned to its hiding places, then, staggering as it were, he first gets up, and little by little returns to all his senses and takes back his spirit. Since, then, these are tossed about by such great diseases within the body itself, and suffer, torn apart in wretched ways, why do you believe that the same things, without a body, in the open air, can live out their time amid mighty winds?
3.510	Et quoniam mentem sanari corpus ut aegrum cernimus et flecti medicina posse videmus, id quoque praesagit mortalem vivere mentem.	Again, since we see that the mind, like a sick body, can be healed, and we see that it can be turned by medicine,

4 These two bracketed lines are a garbled, misplaced echo of 3.510.

	LATIN	ENGLISH
	addere enim partis aut ordine traiecere aecumst aut aliquid prosum de summa detrahere hilum, commutare animum qui cumque adoritur et infit aut aliam quamvis naturam flectere quaerit. at neque transferri sibi partis nec tribui vult inmortale quod est quicquam neque defluere hilum; nam quod cumque suis mutatum finibus exit, continuo hoc mors est illius quod fuit ante. ergo animus sive aegrescit, mortalia signa mittit, uti docui, seu flectitur a medicina. usque adeo falsae rationi vera videtur res occurrere et effugium praecludere eunti ancipitique refutatu convincere falsum.	this too foretells that the mind lives a mortal life. For anyone must add parts, or shift them from their order, or take away at least a whit from the whole, who undertakes and sets out to change the mind or seeks to alter any other nature. But what is immortal will not let its parts be shifted, or anything be added, or a single whit flow away; for whatever changes and passes out of its own bounds, that is at once the death of what it was before. So the mind, whether it falls sick, gives off the signs of mortality, as I have shown, or whether it is turned by medicine. So plainly does the truth seem to confront false reasoning, to bar its escape as it tries to flee, and to prove it false with a two-edged refutation.
3.526	Denique saepe hominem paulatim cernimus ire et membratim vitalem deperdere sensum; in pedibus primum digitos livescere et unguis, inde pedes et crura mori, post inde per artus ire alios tractim gelidi vestigia leti. scinditur atque animae haec quoniam natura nec uno tempore sincera existit, mortalis habendast. quod si forte putas ipsam se posse per artus introsum trahere et partis conducere in unum atque ideo cunctis sensum diducere membris, at locus ille tamen, quo copia tanta animai cogitur, in sensu debet maiore videri; qui quoniam nusquamst, ni mirum, ut diximus [ante], dilaniata foras dispargitur, interit ergo.	Lastly, we often see a man go little by little and lose his vital sense limb by limb: first the toes and nails of his feet turn livid, then the feet and legs die, and after that the tracks of icy death creep slowly on through the other limbs. And since this nature of the spirit is split apart, and does not come forth whole at a single moment, it must be counted mortal. But if perhaps you think it can draw itself inward through the limbs and gather its parts into one, and so withdraw sensation from all the limbs, still that place where so great a store of spirit is gathered ought to show itself with heightened sense; and since there is no such place anywhere, no doubt, as we said before, it is torn apart and scattered abroad, and so it dies.
	/ quin etiam si iam libeat concedere falsum et dare posse animam glomerari in corpore eorum, lumina qui lincunt moribundi particulatim, mortalem tamen esse animam fateare necesse nec refert utrum pereat dispersa per auras an contracta suis e partibus obbrutescat, quando hominem totum magis ac magis undique sensus deficit et vitae minus et minus undique restat.	/ Why, even if we chose to grant what is false and allow that the spirit can be massed together in the body of those who, dying, leave the light piece by piece, you must still admit that the spirit is mortal, and it makes no difference whether it perishes scattered through the air or, drawn in from its parts, grows dull and senseless, since sensation fails the whole man more and

	LATIN	ENGLISH
		more on every side, and less and less of life remains on every side.
3.548	Et quoniam mens est hominis pars una locoque fixa manet certo, vel ut aures atque oculi sunt atque alii sensus qui vitam cumque gubernant, et vel uti manus atque oculus naresve seorsum secreta ab nobis nequeunt sentire neque esse, sed tamen in parvo lincuntur tempore tali, sic animus per se non quit sine corpore et ipso esse homine, illius quasi quod vas esse videtur, sive aliud quid vis potius coniunctius ei fingere, quandoquidem conexu corpus adhaeret.	And since the mind is one part of a man, and stays fixed in a set place, just as the ears and eyes are, and the other senses that steer our life, and since, just as a hand or eye or nostrils, set apart and severed from us, cannot feel or even exist, but in a short time are left to rot, so the mind cannot exist by itself, without the body and the man himself, which seems to be, as it were, its vessel— or whatever else you would rather imagine more closely joined to it, since the body clings to it by a close bond.
3.558	Denique corporis atque animi vivata potestas inter se coniuncta valent vitaque fruuntur; nec sine corpore enim vitalis edere motus sola potest animi per se natura nec autem cassum anima corpus durare et sensibus uti. scilicet avolsus radicibus ut nequit ullam dispicere ipse oculus rem seorsum corpore toto, sic anima atque animus per se nil posse videtur.	Lastly, the living powers of body and mind have strength and enjoy life only when joined together; for the nature of the mind cannot put forth the motions of life without the body, alone and by itself, nor again can the body, bereft of spirit, endure and use its senses. Just as the eye by itself, torn out by its roots, cannot see anything apart from the whole body, so spirit and mind by themselves are plainly powerless.
	/ ni mirum quia [per] venas et viscera mixtim, per nervos atque ossa tenentur corpore ab omni nec magnis intervallis primordia possunt libera dissultare, ideo conclusa moventur sensiferos motus, quos extra corpus in auras aëris haut possunt post mortem eiecta moveri propterea quia non simili ratione tenentur; corpus enim atque animans erit aër, si cohibere sese anima atque in eos poterit concludere motus, quos ante in nervis et in ipso corpore agebat. quare etiam atque etiam resoluto corporis omni tegmine et eiectis extra vitalibus auris dissolui sensus animi fateare necessest atque animam, quoniam coniunctast causa duobus.	/ No doubt because, mingled through veins and flesh, through sinews and bones, they are held in by the whole body, and the first beginnings cannot leap freely apart across great distances, they are shut in and so move with sense-giving motions; but cast out of the body into the breezes of the air after death, they cannot move with these, because they are not held in the same way; for the air would be a body, a living thing, if the spirit could hold itself together in it and confine itself to those motions which it performed before in the sinews and in the body itself. So again and again, when the whole covering of

	LATIN	ENGLISH
		the body is broken up and the breath of life is cast out, you must admit that the senses of the mind are dissolved, and the spirit too, since the two are bound in one cause.
3.580	Denique cum corpus nequeat perferre animai discidium, quin in taetro tabescat odore, quid dubitas quin ex imo penitusque coorta emanarit uti fumus diffusa animae vis, atque ideo tanta mutatum putre ruina conciderit corpus, penitus quia mota loco sunt fundamenta foras manant animaeque per artus perque viarum omnis flexus, in corpore qui sunt, atque foramina? multimodis ut noscere possis dispertitam animae naturam exisse per artus et prius esse sibi distractam corpore in ipso, quam prolapsa foras enaret in aëris auras.	Lastly, since the body cannot endure the spirit's parting without rotting away in a foul stench, why do you doubt that the power of the spirit, rising from the depths, has streamed out, spread abroad like smoke, and that the body, changed and rotting, has collapsed in such great ruin because its foundations, shaken deep from their place, are seeping out, and the spirit's too, through the limbs and through all the winding passages that are in the body, and through its pores? So in many ways you can learn that the nature of the spirit left through the limbs divided up, and was torn apart within the body itself before it slipped out and swam away into the breezes of the air.
3.592	Quin etiam finis dum vitae vertitur intra, saepe aliqua tamen e causa labefacta videtur ire anima ac toto solui de corpore [tota] et quasi supremo languescere tempore voltus molliaque exsangui cadere omnia [corpore] membra. quod genus est, animo male factum cum perhibetur aut animam liquisse; ubi iam trepidatur et omnes extremum cupiunt vitae reprehendere vinclum; conquassatur enim tum mens animaeque potestas omnis. et haec ipso cum corpore conlabefiunt, ut gravior paulo possit dissolvere causa.	Why, even while it still turns within the bounds of life, the spirit often seems, from some cause, to be shaken and ready to go, to be loosed from the whole body entire, and the face seems to grow faint as at the final hour, and all the limbs to fall limp from the bloodless body. This is what happens when we say someone's mind has failed or their spirit has left them; then there is panic, and all long to catch hold again of the last bond of life; for then the mind and the power of the spirit are shaken to pieces, all of it. And these totter together with the body itself, so that a slightly heavier cause could dissolve them.
3.603		

	LATIN	ENGLISH
	Quid dubitas tandem quin extra prodita corpus inbecilla foras in aperto, tegmine dempto, non modo non omnem possit durare per aevom, sed minimum quodvis nequeat consistere tempus? nec sibi enim quisquam moriens sentire videtur ire foras animam incolumem de corpore toto, nec prius ad iugulum et supera succedere fauces, verum deficere in certa regione locatam; ut sensus alios in parti quemque sua scit dissolui. quod si inmortalis nostra foret mens, non tam se moriens dissolvi conquereretur, sed magis ire foras vestemque relinquere, ut anguis.	Why then do you doubt that, once cast forth outside the body, weak, out in the open, its covering stripped away, it could not only not last through all time, but could not hold together for even the briefest moment? For no one dying seems to feel his spirit go out whole from his entire body, or rise first to the throat and the gullet above; rather he feels it fail in its set place, just as he knows that each of his other senses, in its own part, dissolves. But if our mind were immortal, in dying it would not complain so much of dissolving, but rather of going out and leaving its garment behind, like a snake.
3.615	Denique cur animi numquam mens consiliumque gignitur in capite aut pedibus manibusve, sed unis sedibus et certis regionibus omnibus haeret, si non certa loca ad nascendum reddita cuique sunt, et ubi quicquid possit durare creatum atque ita multimodis partitis artubus esse, membrorum ut numquam existat praeposterus ordo? usque adeo sequitur res rem, neque flamma creari fluminibus solitast neque in igni gignier algor.	Lastly, why are the thought and judgment of the mind never born in the head or the feet or the hands, but cling in all men to one seat and to set regions, unless set places are assigned to each thing for its birth, and where each thing, once created, can endure, and so exists with its limbs arranged in their many ways that the order of the members is never turned upside down? So surely does thing follow thing: flame is not wont to be born in rivers, nor cold to be begotten in fire.
3.624	Praeterea si inmortalis natura animaist et sentire potest secreta a corpore nostro, quinque, ut opinor, eam faciundum est sensibus auctam. nec ratione alia nosmet proponere nobis possumus infernas animas Acherunte vagare. pictores itaque et scriptorum saecla priora sic animas intro duxerunt sensibus auctas. at neque sorsum oculi neque nares nec manus ipsa esse potest animae neque sorsum lingua neque aures; haud igitur per se possunt sentire neque esse.	Besides, if the nature of the spirit is immortal and can feel when separated from our body, we must, I think, suppose it endowed with the five senses. In no other way can we picture to ourselves the spirits below wandering in Acheron. And so painters and earlier generations of writers have brought spirits on stage endowed with the senses. But neither eyes nor nostrils nor hand itself can exist for the spirit apart, nor tongue apart, nor ears; so spirits cannot feel, or even exist, by themselves.
3.634	Et quoniam toto sentimus corpore inesse vitalem sensum et totum esse animale videmus, si subito medium celeri praeciderit ictu	And since we feel that vital sense is present in the whole body, and see that the whole is alive,

LATIN	ENGLISH
vis aliqua, ut sorsum partem secernat utramque, dispertita procul dubio quoque vis animai et discissa simul cum corpore dissicietur. at quod scinditur et partis discedit in ullas, scilicet aeternam sibi naturam abnuit esse.	if some force should suddenly cut it through the middle with a swift blow, so as to sever each half apart, no doubt the power of the spirit too will be divided, cut apart, and dashed asunder along with the body. But what is split and falls away into any parts plainly denies that its nature is eternal.
/ falciferos memorant currus abscidere membra saepe ita de subito permixta caede calentis, ut tremere in terra videatur ab artubus id quod decidit abscisum, cum mens tamen atque hominis vis mobilitate mali non quit sentire dolorem; et simul in pugnae studio quod dedita mens est, corpore relicuo pugnam caedesque petessit, nec tenet amissam laevam cum tegmine saepe inter equos abstraxe rotas falcesque rapaces, nec cecidisse alius dextram, cum scandit et instat. inde alius conatur adempto surgere crure, cum digitos agitat propter moribundus humi pes. et caput abscisum calido viventeque trunco servat humi voltum vitalem oculosque patentis, donec reliquias animai reddidit omnes.	/ They tell how scythed chariots often lop off limbs so suddenly, hot with the confusion of slaughter, that the part cut off and fallen from the limbs is seen to quiver on the ground, while the man's mind and strength cannot feel the pain, so swift is the injury; and because his mind is given over to the eagerness of battle, with what is left of his body he makes for fight and slaughter, and often does not notice that his left arm, shield and all, is gone, dragged off among the horses by the wheels and the ravening scythes; another does not notice that his right arm has fallen, as he climbs and presses on. Then another tries to rise on a leg that has been taken away, while the dying foot close by twitches its toes on the ground. And a head cut off from the warm and living trunk keeps on the ground a living look and open eyes until it has given up all the remnants of the spirit.
/ quin etiam tibi si, lingua vibrante, minanti serpentis cauda, procero corpore, utrumque sit libitum in multas partis discidere ferro, omnia iam sorsum cernes ancisa recenti volnere tortari et terram conspargere tabo, ipsam seque retro partem petere ore priorem, volneris ardenti ut morsu premat icta dolore. omnibus esse igitur totas dicemus in illis particulis animas? at ea ratione sequetur unam animantem animas habuisse in corpore multas. ergo divisast ea quae fuit una simul cum corpore; quapropter mortale utrumque putandumst, in multas quoniam partis disciditur aeque.	/ Why, if you chose, while its tongue flickers, to take a snake's menacing tail and long body, and cut both into many pieces with a blade, you will see each severed piece, apart from the rest, with the wound still fresh, writhing and spattering the earth with gore, and the front part turning back with its mouth to seek itself, so as to bite at the wound, struck by its burning pain. Shall we say, then, that there are whole spirits in all those little pieces? But by that reasoning it will follow that one living creature had many spirits in its

	LATIN	ENGLISH
		body. So the spirit, which was one, has been divided along with the body; and therefore both must be thought mortal, since each alike is cut into many parts.
3.670	Praeterea si inmortalis natura animai constat et in corpus nascentibus insinuatur, cur super ante actam aetatem meminisse nequimus nec vestigia gestarum rerum ulla tenemus? nam si tanto operest animi mutata potestas, omnis ut actarum exciderit retinentia rerum, non, ut opinor, id ab leto iam longius errat; qua propter fateare necessest quae fuit ante interiisse, et quae nunc est nunc esse creatam.	Besides, if the nature of the spirit is immortal and slips into the body at our birth, why can we not remember the life we spent before as well, nor keep any traces of the things we did? For if the power of the mind is so greatly changed that all memory of past deeds has dropped away, that, I think, is not far off from death; therefore you must admit that the spirit that was before has perished, and that the one that is now has now been created.
3.679	Praeterea si iam perfecto corpore nobis inferri solitast animi vivata potestas tum cum gignimur et vitae cum limen inimus, haud ita conveniebat uti cum corpore et una cum membris videatur in ipso sanguine cresse, sed vel ut in cavea per se sibi vivere solam convenit, ut sensu corpus tamen affluat omne.	Besides, if, when our body is already complete, the living power of the mind is carried into us at the moment we are born and cross the threshold of life, it would not fit that it should be seen to grow with the body and together with the limbs, in the very blood; rather it ought to live alone by itself, as in a cage, and yet so that the whole body still overflows with sense.
	/ quare etiam atque etiam neque originis esse putandumst expertis animas nec leti lege solutas; nam neque tanto opere adnecti potuisse putandumst corporibus nostris extrinsecus insinuatas, quod fieri totum contra manifesta docet res — namque ita conexa est per venas viscera nervos ossaque, uti dentes quoque sensu participentur; morbus ut indicat et gelidai stringor aquai et lapis oppressus subitis e frugibus asper — nec, tam contextae cum sint, exire videntur incolumes posse et salvas exsolvere sese omnibus e nervis atque ossibus articulisque, quod si forte putas extrinsecus insinuatam permanare animam nobis per membra solere, tanto quique magis cum corpore fusa peribit; quod permanat enim, dissolvitur, interit ergo; dispertitur enim per caulas corporis omnis.	/ So again and again we must not think that spirits are without a birth, or free from the law of death; for we cannot think they could have been so closely bound to our bodies had they slipped in from outside, while the plain facts show that it all happens the other way —for the spirit is so knit through veins, flesh, sinews and bones that even the teeth have a share in sensation, as toothache shows, and the twinge of icy water, and a rough stone bitten on unexpectedly in bread — nor, being so closely woven in, do they seem able to go out unharmed and free themselves whole from all the sinews and bones and joints. But if perhaps you think the spirit, slipping in from outside,

LATIN	ENGLISH
	is wont to seep through our limbs, all the more will it perish, fused with the body; for what seeps through is dissolved, and so it dies; since it is spread abroad through all the pores of the body.
/ ut cibus, in membra atque artus cum diditur omnis, disperit atque aliam naturam sufficit ex se, sic anima atque animus quamvis [est] integra recens [in] corpus eunt, tamen in manando dissoluuntur, dum quasi per caulas omnis diduntur in artus particulae quibus haec animi natura creatur, quae nunc in nostro dominatur corpore nata ex illa quae tunc periit partita per artus. quapropter neque natali privata videtur esse die natura animae nec funeris expers.	/ Just as food, when it is spread through all the limbs and joints, perishes and furnishes another nature out of itself, so spirit and mind, however whole they may be when they go fresh into a body, are still dissolved as they seep in, while there are spread, as it were through pores, into all the limbs the particles of which this nature of the mind is made, which now rules in our body, born from that which perished then, parceled out through the limbs. So the nature of the spirit seems to be neither without a birthday nor free of a funeral.
3.713 Semina praeterea linquontur necne animai corpore in exanimo? quod si lincuntur et insunt, haut erit ut merito inmortalis possit haberi, partibus amissis quoniam libata recessit. sin ita sinceris membris ablata profugit, ut nullas partis in corpore liquerit ex se, unde cadavera rancenti iam viscere vermes expirant atque unde animantum copia tanta exos et exanguis tumidos perfluctuat artus? quod si forte animas extrinsecus insinuari? vermibus et privas in corpora posse venire credis nec reputas cur milia multa animarum conveniant unde una recesserit, hoc tamen est ut quaerendum videatur et in discrimen agendum, utrum tandem animae venentur semina quaeque vermiculorum ipsaeque sibi fabricentur ubi sint, an quasi corporibus perfectis insinuentur.	Besides, are seeds of the spirit left behind or not in the lifeless body? If they are left and remain there, it cannot rightly be held immortal, since it has departed diminished, some of its parts lost. But if it has fled, carried off with its members so intact that it has left no parts of itself in the body, from where do corpses, their flesh now going rank, breathe out worms, and from where does so great a swarm of living things, boneless and bloodless, surge through the swelling limbs? But if perhaps you believe that spirits slip into the worms from outside and can come, each one, into its own body, and do not consider why many thousands of spirits should gather where one has withdrawn, still this question seems worth asking and putting to the test: do the spirits hunt out each of the seeds of the little worms and build themselves a dwelling,

	LATIN	ENGLISH
		or do they slip, as it were, into bodies already complete?
	/ at neque cur faciant ipsae quareve laborent dicere suppeditat. neque enim, sine corpore cum sunt, sollicitae volitant morbis alguque fameque; corpus enim magis his vitiis adfine laborat, et mala multa animus contage fungitur eius. sed tamen his esto quamvis facere utile corpus, cum subeant; at qua possint via nulla videtur. haut igitur faciunt animae sibi corpora et artus. nec tamen est ut qui [cum] perfectis insinuentur corporibus; neque enim poterunt suptiliter esse conexae neque consensu contagia fient.	/ But why they themselves should make them, or why they should toil at it, no one can say. For when they are without a body they do not flit about, troubled by sickness and cold and hunger; it is the body, rather, that is akin to these ills and suffers from them, and the mind suffers many evils through contact with it. But grant, however much you like, that it is useful for them to make a body to enter; still there seems no way they could. So spirits do not make bodies and limbs for themselves. Nor again can they slip into bodies already complete; for they could not be finely knit together with them, nor would there be contact through shared feeling.
3.741	Denique cur acris violentia triste leonum seminium sequitur, volpes dolus, et fuga cervos? a patribus datur et [a] patrius pavor incitat artus, et iam cetera de genere hoc cur omnia membris ex ineunte aevo generascunt ingenioque, si non, certa suo quia semine seminioque vis animi pariter crescit cum corpore quoque? quod si inmortalis foret et mutare soleret corpora, permixtis animantes moribus essent, effugeret canis Hyrcano de semine saepe cornigeri incursum cervi tremeretque per auras aëris accipiter fugiens veniente columba, desiperent homines, saperent fera saecla ferarum.	Lastly, why does fierce violence go with the grim breed of lions, cunning with foxes, and flight with deer? Why is fear passed down from their fathers, and a father's dread spurs their limbs? And why do all other traits of this kind grow in the limbs and in the temper from the very start of life, if not because, from its own fixed seed and breed, the power of the mind grows up together with each body? But if it were immortal and used to change bodies, living creatures would have mixed-up characters: a dog of Hyrcanian breed would often flee the charge of an antlered stag, and the hawk would tremble through the breezes of the air, fleeing at the dove's approach; men would lose their wits, and the wild tribes of beasts would be wise.[5]
	/ illud enim falsa fertur ratione, quod aiunt inmortalem animam mutato corpore flecti; quod mutatur enim, dissolvitur, interit ergo; traiciuntur enim partes atque ordine migrant; quare dissolui quoque debent posse per artus, denique ut intereant una cum corpore cunctae. sin animas hominum dicent in corpora semper	/ For that claim is carried along by false reasoning, when they say that an immortal spirit is altered when it changes bodies; for what is changed is dissolved, and so it dies; its parts are shifted and move from their order;

5 Hyrcania, by the Caspian Sea, was famous for its fierce hunting dogs.

	LATIN	ENGLISH
	ire humana, tamen quaeram cur e sapienti stulta queat fieri, nec prudens sit puer ullus, [si non, certa suo quia semine seminioque] nec tam doctus equae pullus quam fortis equi vis. scilicet in tenero tenerascere corpore mentem confugient. quod si iam fit, fateare necessest mortalem esse animam, quoniam mutata per artus tanto opere amittit vitam sensumque priorem.	so they must also be capable of being dissolved through the limbs, so that in the end they all perish together with the body. But if they say that human spirits always pass into human bodies, I shall still ask why from a wise one a foolish one can come, why no child is sensible, [if not because, from its own fixed seed and breed,] and why a mare's foal is not as well trained as a strong horse. No doubt they will take refuge in saying that in a tender body the mind grows tender. But if that happens, you must admit that the spirit is mortal, since, changed throughout the limbs, it so utterly loses its former life and sense.
	/ quove modo poterit pariter cum corpore quoque confirmata cupitum aetatis tangere florem vis animi, nisi erit consors in origine prima? quidve foras sibi vult membris exire senectis? an metuit conclusa manere in corpore putri et domus aetatis spatio ne fessa vetusto obruat? at non sunt immortali ulla pericla.	/ Or how, growing strong together with each body, will it be able to reach the longed-for flower of life, this power of the mind, unless it is a partner from the very first origin? Or why does it want to go out from aged limbs? Does it fear to stay shut up in a decaying body, fear that its house, worn out by the long span of years, may fall in on it? But there are no dangers for an immortal thing.
3.776	Denique conubia ad Veneris partusque ferarum esse animas praesto deridiculum esse videtur, expectare immortalis mortalia membra innumero numero certareque praeproperanter inter se quae prima potissimaque insinuetur; si non forte ita sunt animarum foedera pacta, ut quae prima volans advenerit insinuetur prima neque inter se contendant viribus hilum.	Lastly, that spirits should stand ready at the matings of Venus and the births of beasts seems quite absurd— immortals waiting for mortal limbs in numbers beyond number, and competing in headlong haste among themselves over which shall slip in first and foremost; unless perhaps the spirits have struck a treaty that whichever comes flying first shall slip in first, and they shall not fight among themselves at all.
3.784	Denique in aethere non arbor, non aequore in alto nubes esse queunt nec pisces vivere in arvis nec cruor in lignis neque saxis sucus inesse. certum ac dispositumst ubi quicquid crescat et insit. sic animi natura nequit sine corpore oriri sola neque a nervis et sanguine longius esse. quod si posset enim, multo prius ipsa animi vis	Lastly, no tree can exist in the sky, no clouds in the deep sea, nor can fish live in the fields, nor blood be found in wood, nor sap in stones. It is fixed and ordained where each thing is to grow and dwell. So the nature of the mind cannot arise alone

LATIN	ENGLISH
in capite aut umeris aut imis calcibus esse posset et innasci quavis in parte soleret, tandem in eodem homine atque in eodem vase manere. quod quoniam nostro quoque constat corpore certum dispositumque videtur ubi esse et crescere possit sorsum anima atque animus, tanto magis infitiandum totum posse extra corpus durare genique.	without the body, nor exist far from sinews and blood. For if it could, far sooner could the power of the mind itself be in the head or shoulders or the bottom of the heels, and it would be wont to be born in any part at all, so long as it stayed in the same man and the same vessel. But since in our body too it is plainly fixed and ordained where spirit and mind can each exist and grow apart, all the more must we deny that it can endure or be born wholly outside the body.
/ quare, corpus ubi interiit, periisse necessest confiteare animam distractam in corpore toto. quippe etenim mortale aeterno iungere et una consentire putare et fungi mutua posse desiperest; quid enim diversius esse putandumst aut magis inter se disiunctum discrepitansque, quam mortale quod est inmortali atque perenni iunctum in concilio saevas tolerare procellas?	/ Therefore, when the body has perished, you must admit that the spirit has perished too, torn apart throughout the body. Indeed, to join the mortal to the eternal, and to think they can feel together and act on each other, is folly; for what can be thought more at odds, more estranged from each other and more discordant, than that what is mortal, joined in union with the immortal and everlasting, should endure fierce storms together?
/ praeterea quaecumque manent aeterna necessest aut quia sunt solido cum corpore respuere ictus nec penetrare pati sibi quicquam quod queat artas dissociare intus partis, ut materiai corpora sunt, quorum naturam ostendimus ante, aut ideo durare aetatem posse per omnem, plagarum quia sunt expertia sicut inanest, quod manet intactum neque ab ictu fungitur hilum, aut etiam quia nulla loci sit copia circum, quo quasi res possint discedere dissoluique, sicut summarum summast aeterna, neque extra quis locus est quo diffugiant neque corpora sunt quae possint incidere et valida dissolvere plaga.	/ Besides, whatever things endure forever must either, being of solid body, repel blows and let nothing pierce them that could unfasten their close-packed parts within, like the bodies of matter, whose nature we have shown before; or be able to last through all time because they are free from blows, as the void is, which remains untouched and is not affected a whit by any blow; or else because there is no store of space around them into which things might, as it were, part and be dissolved— as the sum of all sums is eternal, and outside it there is no place into which things may scatter, nor bodies that could fall on it and dissolve it with a heavy blow.

3.819

	LATIN	ENGLISH
	Quod si forte ideo magis inmortalis habendast, quod vitalibus ab rebus munita tenetur, aut quia non veniunt omnino aliena salutis, aut quia quae veniunt aliqua ratione recedunt pulsa prius quam quid noceant sentire queamus, ... praeter enim quam quod morbis cum corporis aegret, advenit id quod eam de rebus saepe futuris macerat inque metu male habet curisque fatigat, praeteritisque male admissis peccata remordent. adde furorem animi proprium atque oblivia rerum, adde quod in nigras lethargi mergitur undas.	But if perhaps it should rather be held immortal because it is kept safe, fortified by things that preserve life, or because things hostile to its well-being never come at all, or because those that do come are somehow driven back and retreat before we can feel any harm they do, ... For besides the fact that it sickens along with the diseases of the body, there comes something that often torments it about the future, keeps it wretched in fear and wears it out with cares, and for past wrongdoing its misdeeds bring the bite of remorse. Add the madness that belongs to the mind alone, and forgetfulness of things; add that it sinks into the black waters of lethargy.[6]

DEATH IS NOTHING TO US

Since the soul dies with the body, death cannot harm us, and nature rebukes those who fear it.

	LATIN	ENGLISH
3.830	Nil igitur mors est ad nos neque pertinet hilum, quandoquidem natura animi mortalis habetur. et vel ut ante acto nihil tempore sensimus aegri, ad confligendum venientibus undique Poenis, omnia cum belli trepido concussa tumultu horrida contremuere sub altis aetheris auris, in dubioque fuere utrorum ad regna cadendum omnibus humanis esset terraque marique, sic, ubi non erimus, cum corporis atque animai discidium fuerit, quibus e sumus uniter apti, scilicet haud nobis quicquam, qui non erimus tum, accidere omnino poterit sensumque movere, non si terra mari miscebitur et mare caelo.	Death, then, is nothing to us, and concerns us not a whit, since the nature of the mind is held to be mortal. And just as in time past we felt no distress when the Carthaginians came from every side to battle, when everything, shaken by the trembling tumult of war, shuddered in horror beneath the high breezes of heaven, and it was in doubt to whose rule all humankind must fall, on land and sea, so, when we are no more, when there has come the parting of body and spirit, from which we are joined into one, nothing, we may be sure, to us who will not then exist will be able to happen at all, or stir our senses— not even if earth is mingled with sea, and sea with sky.[7]

6 Some lines are lost here; the argument must have gone on to deny that the spirit is so protected.
7 The Carthaginians fought Rome in the Punic Wars (264–146 BC), when Hannibal invaded Italy itself.

	LATIN	ENGLISH
	/ et si iam nostro sentit de corpore postquam distractast animi natura animaeque potestas, nil tamen est ad nos, qui comptu coniugioque corporis atque animae consistimus uniter apti. nec, si materiem nostram collegerit aetas post obitum rursumque redegerit ut sita nunc est, atque iterum nobis fuerint data lumina vitae, pertineat quicquam tamen ad nos id quoque factum, interrupta semel cum sit repetentia nostri. et nunc nil ad nos de nobis attinet, ante qui fuimus, [neque] iam de illis nos adficit angor.	/ And even if it still feels after being torn from our body— the nature of the mind and the power of the spirit — it is still nothing to us, who are made one by the binding and marriage of body and spirit. Nor, if time should gather up our matter after death and bring it back again as it is now placed, and the light of life were given to us once more, would even that event concern us in the least, once the chain of our remembering has been broken. And now nothing concerns us about ourselves who existed before, nor does any anguish touch us over them.
	/ nam cum respicias inmensi temporis omne praeteritum spatium, tum motus materiai multimodi quam sint, facile hoc adcredere possis, semina saepe in eodem, ut nunc sunt, ordine posta haec eadem, quibus e nunc nos sumus, ante fuisse. nec memori tamen id quimus reprehendere mente; inter enim iectast vitai pausa vageque deerrarunt passim motus ab sensibus omnes. debet enim, misere si forte aegreque futurumst; ipse quoque esse in eo tum tempore, cui male possit accidere.	/ For when you look back over the whole past span of measureless time, and consider how manifold are the motions of matter, you may easily believe this: that the seeds have often been placed in the same order they are in now, these same seeds of which we are now made, in time gone by. Yet we cannot recapture this with the mind's memory; for a pause in life has been cast between, and all the motions have wandered astray, scattered far from the senses. For if anyone is to fare badly and suffer in the future, he himself must also exist at that time, so that harm can befall him.
	id quoniam mors eximit, esseque prohibet illum cui possint incommoda conciliari, scire licet nobis nihil esse in morte timendum nec miserum fieri qui non est posse, neque hilum differre an nullo fuerit iam tempore natus, mortalem vitam mors cum inmortalis ademit.	Since death takes this away, and prevents the existence of him on whom troubles could gather, we may know that there is nothing to fear in death, that one who does not exist cannot be made wretched, and that it makes not a whit of difference whether he had ever been born at all, when immortal death has taken mortal life.
3.870	Proinde ubi se videas hominem indignarier ipsum, post mortem fore ut aut putescat corpore posto aut flammis interfiat malisve ferarum, scire licet non sincerum sonere atque subesse	So when you see a man chafing at his own fate, that after death he will either rot with his body laid in the ground, or be destroyed by flames or by the jaws of wild

LATIN	ENGLISH
caecum aliquem cordi stimulum, quamvis neget ipse credere se quemquam sibi sensum in morte futurum; non, ut opinor, enim dat quod promittit et unde nec radicitus e vita se tollit et eicit, sed facit esse sui quiddam super inscius ipse. vivus enim sibi cum proponit quisque futurum, corpus uti volucres lacerent in morte feraeque, ipse sui miseret; neque enim se dividit illim nec removet satis a proiecto corpore et illum se fingit sensuque suo contaminat astans.	beasts, you may know that he does not ring true, and that there lurks some hidden goad in his heart, though he himself denies believing that he will have any feeling in death. For he does not, I think, grant what he professes, nor its grounds; he does not tear himself up by the roots and cast himself out of life, but, unaware, makes something of himself survive. For when a living man pictures to himself that birds and beasts will tear his body in death, he pities himself; for he does not separate himself from it, nor remove himself enough from the cast-out body, but imagines that it is himself, and, standing by, taints it with his own feeling.
/ hinc indignatur se mortalem esse creatum nec videt in vera nullum fore morte alium se, qui possit vivus sibi se lugere peremptum stansque iacentem [se] lacerari urive dolere. nam si in morte malumst malis morsuque ferarum tractari, non invenio qui non sit acerbum ignibus inpositum calidis torrescere flammis aut in melle situm suffocari atque rigere frigore, cum summo gelidi cubat aequore saxi, urgerive superne obrutum pondere terrae. 'Iam iam non domus accipiet te laeta neque uxor optima, nec dulces occurrent oscula nati praeripere et tacita pectus dulcedine tangent. non poteris factis florentibus esse tuisque praesidium.	/ Hence he resents having been born mortal, and does not see that in real death there will be no other self that could live on to mourn his own passing and stand by, grieving that he himself lies there torn or burned. For if it is an evil in death to be mauled by the jaws and teeth of wild beasts, I cannot see why it is not bitter to be laid on a pyre and roast in the hot flames, or to be placed in honey and smothered, and to grow stiff with cold, lying on the smooth top of an icy slab of stone, or to be crushed beneath the weight of earth heaped above. “Now no more will your happy home welcome you, nor your excellent wife, nor will your sweet children run to snatch the first kiss and touch your heart with silent joy. You will not be able to prosper in your affairs, or to be a shield to your own.
misero misere' aiunt 'omnia ademit una dies infesta tibi tot praemia vitae.' illud in his rebus non addunt 'nec tibi earum iam desiderium rerum super insidet una.' quod bene si videant animo dictisque sequantur, dissoluant animi magno se angore metuque.	Poor wretch, how wretchedly,” they say, “one hateful day has taken from you all these many prizes of life.” But in this they do not add: “Nor does any longing for these things remain with you any more.”

	LATIN	ENGLISH
	'tu quidem ut es leto sopitus, sic eris aevi quod super est cunctis privatus doloribus aegris; at nos horrifico cinefactum te prope busto insatiabiliter deflevimus, aeternumque nulla dies nobis maerorem e pectore demet.' illud ab hoc igitur quaerendum est, quid sit amari tanto opere, ad somnum si res redit atque quietem, cur quisquam aeterno possit tabescere luctu.	If they saw this clearly in their minds and followed it in their words, they would free themselves from great anguish and fear of mind. “You, indeed, as you are now asleep in death, so will you be for all the time to come, freed from all painful sorrows; but we, close by, as you turned to ash on the dreadful pyre, have wept for you insatiably, and our everlasting grief no day will take from our hearts.” So this must be asked of such a man: what is so very bitter, if it all comes back to sleep and rest, that anyone should waste away in endless mourning?
3.912	Hoc etiam faciunt ubi discubuere tenentque pocula saepe homines et inumbrant ora coronis, ex animo ut dicant: 'brevis hic est fructus homullis; iam fuerit neque post umquam revocare licebit.' tam quam in morte mali cum primis hoc sit eorum, quod sitis exurat miseros atque arida torrat, aut aliae cuius desiderium insideat rei. nec sibi enim quisquam tum se vitamque requiret, cum pariter mens et corpus sopita quiescunt; nam licet aeternum per nos sic esse soporem, nec desiderium nostri nos adficit ullum, et tamen haud quaquam nostros tunc illa per artus longe ab sensiferis primordia motibus errant, cum correptus homo ex somno se colligit ipse.	This too men often do when they have taken their places at table, cups in hand, their faces shaded with garlands: they say from the heart, “Brief is this enjoyment for us poor mortals; soon it will be over, and never after can we call it back.” As if, in death, this were chief among their woes, that thirst should burn the poor wretches up and parch them dry, or that a longing for something else should weigh on them. For no one misses himself and his life when mind and body alike are quiet in sleep; for all we care, that sleep might go on forever, and no longing for ourselves touches us; and yet at that time those first beginnings throughout our limbs are not wandering far from their sense-giving motions, since a man, startled from sleep, gathers himself together.
	/ multo igitur mortem minus ad nos esse putandumst, si minus esse potest quam quod nihil esse videmus; maior enim turbae disiectus materiai consequitur leto nec quisquam expergitus extat, frigida quem semel est vitai pausa secuta.	/ Death, then, must be thought to be much less to us, if there can be less than what we see is nothing; for a greater scattering of the thronging matter follows on death, and no one wakes and rises once the cold pause of life has overtaken him.
3.931	Denique si vocem rerum natura repente mittat et hoc alicui nostrum sic increpet ipsa: 'quid tibi tanto operest, mortalis, quod nimis aegris luctibus indulges? quid mortem congemis ac fles?	Lastly, if the nature of things should suddenly find a voice and should herself rebuke one of us like this: “What troubles you so much, mortal, that you give

LATIN	ENGLISH
nam [si] grata fuit tibi vita ante acta priorque et non omnia pertusum congesta quasi in vas commoda perfluxere atque ingrata interiere; cur non ut plenus vitae conviva recedis aequo animoque capis securam, stulte, quietem? sin ea quae fructus cumque es periere profusa vitaque in offensost, cur amplius addere quaeris, rursum quod pereat male et ingratum occidat omne, non potius vitae finem facis atque laboris? nam tibi praeterea quod machiner inveniamque, quod placeat, nihil est; eadem sunt omnia semper.	yourself up to such sick grief? Why do you groan and weep at death? For if your past life has been pleasing to you, and all its blessings have not, as if poured into a leaky jar, run through and been lost unenjoyed, why not leave like a guest who has had his fill of life, and take, you fool, your untroubled rest with a calm mind? But if all you have enjoyed has been poured away and lost, and life is hateful to you, why seek to add more, only for it to be lost again and all perish unenjoyed? Why not rather make an end of life and toil? For there is nothing more I can devise or discover for you to please you: all things are always the same.
/ si tibi non annis corpus iam marcet et artus confecti languent, eadem tamen omnia restant, omnia si perges vivendo vincere saecla, atque etiam potius, si numquam sis moriturus', quid respondemus, nisi iustam intendere litem naturam et veram verbis exponere causam? grandior hic vero si iam seniorque queratur atque obitum lamentetur miser amplius aequo, non merito inclamet magis et voce increpet acri: 'aufer abhinc lacrimas, baratre, et compesce querellas. omnia perfunctus vitai praemia marces; sed quia semper aves quod abest, praesentia temnis, inperfecta tibi elapsast ingrataque vita, et nec opinanti mors ad caput adstitit ante quam satur ac plenus possis discedere rerum.	/ If your body is not yet withered with years, nor your limbs worn out and weary, still all things remain the same, even if you go on to outlive all generations, and even more so if you were never to die." What do we answer, except that nature brings a just charge and in her words sets out a true case? But if an older man, well on in years, should complain and lament his death, poor fellow, more than is fitting, would she not be right to cry out more loudly and rebuke him in a sharp voice: "Away with your tears, you bottomless pit, and stop your complaining. You have enjoyed all the prizes of life, and now you wither; but because you always long for what is absent and scorn what is present, life has slipped away from you incomplete and unenjoyed, and death has come to stand at your head before you expected, before you could leave satisfied and full of things.
/ nunc aliena tua tamen aetate omnia mitte aequo animoque, age dum, magnis concede necessis?' iure, ut opinor, agat, iure increpet inciletque;	/ But now let go of all that does not suit your age, and with a calm mind—come now—yield to great necessity."

	LATIN	ENGLISH
	cedit enim rerum novitate extrusa vetustas semper, et ex aliis aliud reparare necessest.	She would be right, I think, to plead so, right to rebuke and reproach; for the old always gives way, thrust out by the new, and one thing must be restored from others.
3.966	Nec quisquam in barathrum nec Tartara deditur atra; materies opus est, ut crescant postera saecla; quae tamen omnia te vita perfuncta sequentur; nec minus ergo ante haec quam tu cecidere cadentque. sic alid ex alio numquam desistet oriri vitaque mancipio nulli datur, omnibus usu. respice item quam nil ad nos ante acta vetustas temporis aeterni fuerit, quam nascimur ante. hoc igitur speculum nobis natura futuri temporis exponit post mortem denique nostram. numquid ibi horribile apparet, num triste videtur quicquam, non omni somno securius exstat?	No one is handed over to the pit, or to black Tartarus; matter is needed so that later generations may grow; yet all of them, when their life is done, will follow you; and so, no less than you, these have fallen before and will fall. So one thing will never cease to rise from another, and life is given to none to own, to all to use. Look back, too, and see how the ages of eternal time that passed before we were born have been nothing to us. This, then, is the mirror nature holds up to us of the time to come, when at last we are dead. Does anything there seem horrible? Does anything look grim? Is it not more untroubled than any sleep?

HELL ON EARTH

The punishments of the underworld are pictures of human passions and fears in this life.

	LATIN	ENGLISH
3.978	Atque ea ni mirum quae cumque Acherunte profundo prodita sunt esse, in vita sunt omnia nobis. nec miser inpendens magnum timet aëre saxum Tantalus, ut famast, cassa formidine torpens; sed magis in vita divom metus urget inanis mortalis casumque timent quem cuique ferat fors. nec Tityon volucres ineunt Acherunte iacentem nec quod sub magno scrutentur pectore quicquam perpetuam aetatem possunt reperire profecto. quam libet immani proiectu corporis exstet, qui non sola novem dispessis iugera membris optineat, sed qui terrai totius orbem, non tamen aeternum poterit perferre dolorem nec praebere cibum proprio de corpore semper.	And surely all the things that tradition says exist in deep Acheron are all here with us, in life. There is no wretched Tantalus fearing the great rock that hangs in the air, as the story goes, numb with empty terror; rather, in life an idle fear of the gods oppresses mortals, and they fear whatever fall chance may bring to each. Nor do birds burrow into Tityos as he lies in Acheron, nor could they find anything to probe beneath that vast chest through all eternity, to be sure. However huge the sprawl of his body, though he covered not just nine acres with outstretched limbs but the whole round of the earth,

LATIN	ENGLISH
	he still could not endure eternal pain or supply food from his own body forever.[8]
/ sed Tityos nobis hic est, in amore iacentem quem volucres lacerant atque exest anxius angor aut alia quavis scindunt cuppedine curae. Sisyphus in vita quoque nobis ante oculos est, qui petere a populo fasces saevasque secures imbibit et semper victus tristisque recedit. nam petere imperium, quod inanest nec datur umquam, atque in eo semper durum sufferre laborem, hoc est adverso nixantem trudere monte saxum, quod tamen [e] summo iam vertice rusum volvitur et plani raptim petit aequora campi.	/ No, our Tityos is here: the man who lies prostrate in love, whom the birds tear, and gnawing anguish eats away, or cares rend with some other craving. Sisyphus too is here in life, before our eyes: the man bent on seeking from the people the rods and the cruel axes, who always withdraws defeated and gloomy. For to seek power, which is empty and is never really given, and always to endure hard toil in its pursuit, this is to strain and shove up the mountain's face a rock that even so, from the very summit, rolls back again and rushes headlong for the level of the plain.[9]
/ deinde animi ingratam naturam pascere semper atque explere bonis rebus satiareque numquam, quod faciunt nobis annorum tempora, circum cum redeunt fetusque ferunt variosque lepores, nec tamen explemur vitai fructibus umquam, hoc, ut opinor, id est, aevo florente puellas quod memorant laticem pertusum congerere in vas, quod tamen expleri nulla ratione potestur. Cerberus et Furiae iam vero et lucis egestas, Tartarus horriferos eructans faucibus aestus!	/ Then, forever to feed the mind's ungrateful nature, to fill it with good things and never satisfy it, as the seasons of the year do for us when they come round again and bring their fruits and their varied charms, and yet we are never filled with the fruits of life— this, I think, is what is meant by the girls in the bloom of youth who, the story says, pour water into a leaking jar that can never by any means be filled. Cerberus and the Furies, then, and the dearth of light, Tartarus belching terrible blasts of heat from its jaws![10]
/ qui neque sunt usquam nec possunt esse profecto; sed metus in vita poenarum pro male factis est insignibus insignis scelerisque luela, carcer et horribilis de saxo iactus deorsum, verbera carnifices robur pix lammina taedae; quae tamen etsi absunt, at mens sibi conscia factis praemetuens adhibet stimulos torretque flagellis, nec videt interea qui terminus esse malorum possit nec quae sit poenarum denique finis,	/ These exist nowhere, and surely cannot exist; but in life there is fear of punishment for evil deeds, notable for notable ones, and atonement for crime: prison, and the dreadful hurling down from the rock, scourges, executioners, the dungeon, pitch, red-hot plates, torches; and even if these are absent, the mind, conscious

8 Tantalus and Tityos are sinners punished in the underworld: Tantalus, in one version, beneath a rock forever about to fall; Tityos with vultures tearing at his liver.

9 Sisyphus was condemned forever to roll a rock uphill. The rods and axes (fasces) were carried before Roman magistrates as emblems of office.

10 The daughters of Danaus, who murdered their husbands, were punished in the underworld by having to fill a leaking jar.

	LATIN	ENGLISH
	atque eadem metuit magis haec ne in morte gravescant. hic Acherusia fit stultorum denique vita.	of its deeds and fearing in advance, applies the goads and sears itself with lashes, and meanwhile does not see what end there can be to its sufferings, or what limit at last to its punishments, and fears that these same things may grow heavier in death. Here, in the end, the life of fools becomes Acheron.[11]
3.1024	Hoc etiam tibi tute interdum dicere possis. 'lumina sis oculis etiam bonus Ancus reliquit, qui melior multis quam tu fuit, improbe, rebus. inde alii multi reges rerumque potentes occiderunt, magnis qui gentibus imperitarunt. ille quoque ipse, viam qui quondam per mare magnum stravit iterque dedit legionibus ire per altum ac pedibus salsas docuit super ire lacunas et contempsit equis insultans murmura ponti, lumine adempto animam moribundo corpore fudit. Scipiadas, belli fulmen, Carthaginis horror, ossa dedit terrae proinde ac famul infimus esset. adde repertores doctrinarum atque leporum, adde Heliconiadum comites; quorum unus Homerus sceptra potitus eadem aliis sopitus quietest.	This too you might say to yourself from time to time: “Even good Ancus, you know, closed his eyes on the light, and he was a better man than you, you shameless man, in many ways. Since then many other kings and lords of the world have fallen, who ruled over mighty nations. Even he who once laid a road across the great sea and gave his legions a path to march over the deep, and taught them to walk on foot across the salt lagoons, and scorned the roaring of the sea as his horses pranced over it, lost the light and poured out his spirit from a dying body. The scion of the Scipios, thunderbolt of war, terror of Carthage, gave his bones to the earth as if he were the lowest slave. Add the discoverers of sciences and of graces, add the companions of the Muses of Helicon—among them Homer, who alone held the scepter, sleeps the same sleep as the others.[12]
	/ denique Democritum post quam matura vetustas admonuit memores motus languescere mentis, sponte sua leto caput obvius optulit ipse. ipse Epicurus obit decurso lumine vitae, qui genus humanum ingenio superavit et omnis restinxit stellas exortus ut aetherius sol. tu vero dubitabis et indignabere obire?	/ Then Democritus, when ripe old age warned him that the remembering motions of his mind were failing, went of his own accord to meet death and offered up his head. Epicurus himself died when the light of his life had run its course, he who surpassed the human race in genius and

11 The rock is the Tarpeian Rock in Rome, from which condemned criminals were thrown.
12 Ancus Marcius was the legendary fourth king of Rome; the line echoes Ennius. The bridge-builder is Xerxes, who bridged the Hellespont, and the Scipio is Scipio Africanus, conqueror of Hannibal.

LATIN	ENGLISH
	quenched every star, as the sun does when it rises in the sky. And you—will you hesitate, and resent it, when you must die?[13]
/ mortua cui vita est prope iam vivo atque videnti, qui somno partem maiorem conteris aevi, et vigilans stertis nec somnia cernere cessas sollicitamque geris cassa formidine mentem nec reperire potes tibi quid sit saepe mali, cum ebrius urgeris multis miser undique curis atque animo incerto fluitans errore vagaris.' Si possent homines, proinde ac sentire videntur pondus inesse animo, quod se gravitate fatiget, e quibus id fiat causis quoque noscere et unde tanta mali tam quam moles in pectore constet, haut ita vitam agerent, ut nunc plerumque videmus quid sibi quisque velit nescire et quaerere semper, commutare locum, quasi onus deponere possit.	/ You, whose life is as good as dead though you still live and see, who waste the greater part of your time in sleep, who snore while awake and never stop seeing dreams, and carry a mind troubled with empty terror, and often cannot find what is wrong with you, when, drunk and wretched, you are pressed by many cares on every side, and drift and wander with your mind unsteady and astray." If people could, just as they evidently feel there is a weight upon their minds that wears them down with its heaviness, also know from what causes it comes, and why so great a mass of misery, as it were, lies upon their hearts, they would not live their lives as now we mostly see them: each not knowing what he wants, and always seeking to change his place, as if he could lay his burden down.
/ exit saepe foras magnis ex aedibus ille, esse domi quem pertaesumst, subitoque [revertit], quippe foris nihilo melius qui sentiat esse. currit agens mannos ad villam praecipitanter auxilium tectis quasi ferre ardentibus instans; oscitat extemplo, tetigit cum limina villae, aut abit in somnum gravis atque oblivia quaerit, aut etiam properans urbem petit atque revisit.	/ Often he goes out of his great mansion, the man sick of being at home, and suddenly comes back, since he feels no better off out of doors. He drives his ponies headlong to his country house, racing as if to bring help to a burning building; the moment he touches the threshold of the house he yawns, or sinks heavily into sleep and seeks oblivion, or even hurries back to the city to see it again.
/ hoc se quisque modo fugit, at quem scilicet, ut fit, effugere haut potis est: ingratius haeret et odit propterea, morbi quia causam non tenet aeger; quam bene si videat, iam rebus quisque relictis naturam primum studeat cognoscere rerum, temporis aeterni quoniam, non unius horae, ambigitur status, in quo sit mortalibus omnis aetas, post mortem quae restat cumque manendo.	/ In this way each person flees himself—a self, of course, that, as happens, he cannot escape: he clings to it unwillingly and hates it, because he is sick and does not grasp the cause of his disease. If he saw that clearly, each would leave everything else

13 Democritus was said to have ended his life by starving himself. This is the only line in the poem that names Epicurus.

LATIN	ENGLISH
	and strive first of all to learn the nature of things, since it is the condition of eternal time, not of a single hour, that is in question—the condition in which mortals must spend all the time that remains to them after death, forever.
3.1076 Denique tanto opere in dubiis trepidare periclis quae mala nos subigit vitai tanta cupido? certe equidem finis vitae mortalibus adstat nec devitari letum pote, quin obeamus. praeterea versamur ibidem atque insumus usque nec nova vivendo procuditur ulla voluptas; sed dum abest quod avemus, id exsuperare videtur cetera; post aliud, cum contigit illud, avemus et sitis aequa tenet vitai semper hiantis. posteraque in dubiost fortunam quam vehat aetas, quidve ferat nobis casus quive exitus instet. nec prorsum vitam ducendo demimus hilum tempore de mortis nec delibare valemus, quo minus esse diu possimus forte perempti.	Lastly, what evil, what great craving for life drives us to tremble so much in doubtful dangers? Surely a fixed end of life awaits mortals, and death cannot be avoided: we must meet it. Besides, we move round in the same place and stay there always, and no new pleasure is hammered out by living longer; but while what we crave is absent, it seems to surpass all else; then, once we have it, we crave something else, and an equal thirst for life holds us, always open-mouthed. And it is doubtful what fortune later years will bring, what chance will bring us, or what end is at hand. Nor by prolonging life do we take one jot from the time of death, nor can we subtract anything to make us, perhaps, dead for a shorter while.
/ proinde licet quod vis vivendo condere saecla, mors aeterna tamen nihilo minus illa manebit, nec minus ille diu iam non erit, ex hodierno lumine qui finem vitai fecit, et ille, mensibus atque annis qui multis occidit ante.	/ So you may live and outlast as many generations as you please: death will still be waiting, eternal all the same, and he who ended his life with today's light will be no more for no less a time than he who fell many months and years ago.

Book IV

The senses
Images and perception, sleep and dreams, and the madness of love.

	LATIN	ENGLISH
4.1	Avia Pieridum peragro loca nullius ante trita solo. iuvat integros accedere fontis atque haurire, iuvatque novos decerpere flores insignemque meo capiti petere inde coronam, unde prius nulli velarint tempora musae; primum quod magnis doceo de rebus et artis religionum animum nodis exsolvere pergo, deinde quod obscura de re tam lucida pango carmina musaeo contingens cuncta lepore.	I roam the pathless haunts of the Pierides, trodden by no one's foot before. It is a joy to approach un- touched springs and drink from them, a joy to pluck new flowers and seek for my head a splendid crown from places where the Muses have never before wreathed any- one's brow: first, because I teach of great things and press on to free the mind from the tight knots of religion; then, because on so dark a subject I compose such lucid verses, touching everything with the Muses' charm.[1]
	/ id quoque enim non ab nulla ratione videtur; nam vel uti pueris absinthia taetra medentes cum dare conantur, prius oras pocula circum contingunt mellis dulci flavoque liquore, ut puerorum aetas inprovida ludificetur labrorum tenus, interea perpotet amarum absinthi laticem deceptaque non capiatur, sed potius tali facto recreata valescat, sic ego nunc, quoniam haec ratio plerumque videtur tristior esse quibus non est tractata, retroque volgus abhorret ab hac, volui tibi suaviloquenti carmine Pierio rationem exponere nostram et quasi musaeo dulci contingere melle; si tibi forte animum tali ratione tenere versibus in nostris possem, dum percipis omnem naturam rerum ac persentis utilitatem.	/ For this too seems not to be without good reason. For just as doctors, when they try to give children foul wormwood, first touch the rims all around the cups with the sweet golden liquid of honey, so that the unsuspecting age of childhood may be fooled as far as the lips, and meanwhile drink down the bitter juice of wormwood, and be tricked but not harmed, but rather be restored by such means and grow well— so I now, since this account of things often seems rather grim to those who have not tried it, and the crowd shrinks back from it, have chosen to set out our reasoning for you in the sweet-voiced song of the Pierides and, as it were, to touch it with the Muses' sweet honey, in the hope that by such means I might hold your mind

1 Book IV opens by repeating 1.926–950.

	LATIN	ENGLISH
		on my verses, while you take in the whole nature of things and feel its full usefulness.

IMAGES

Thin films stream constantly from the surfaces of things and cause sight.

	LATIN	ENGLISH
4.26	Sed quoniam docui cunctarum exordia rerum qualia sint et quam variis distantia formis sponte sua volitent aeterno percita motu quoque modo possit res ex his quaeque creari, [nunc agere incipiam tibi quod vehementer ad has res] [attinet esse ea quae rerum simulacra vocamus,] [quae quasi membranae vel cortex nominitandast,] atque animi quoniam docui natura quid esset et quibus e rebus cum corpore compta vigeret quove modo distracta rediret in ordia prima, nunc agere incipiam tibi, quod vehementer ad has res attinet esse ea quae rerum simulacra vocamus, quod speciem ac formam similem gerit eius imago, cuius cumque cluet de corpore fusa vagari;	But since I have taught what the beginnings of all things are like, and how, differing in their varied shapes, they fly about of their own accord, driven by eternal motion, and in what way each thing can be created out of them, [now I shall begin to treat for you what is closely bound up with these matters:] [that there exist what we call images of things,] [which should be called, as it were, films or bark;] and since I have taught what the nature of the mind is, and from what things it draws its strength when joined with the body, and how, torn apart, it returns to its first begin- nings, now I shall begin to treat for you what is closely bound up with these matters: that there exist what we call images of things, for the image bears an appearance and form like that thing from whose body, whatever it is, it is said to have poured off and to wander;[2]
	/ quae quasi membranae summo de corpore rerum dereptae volitant ultroque citroque per auras, atque eadem nobis vigilantibus obvia mentes terrificant atque in somnis, cum saepe figuras contuimur miras simulacraque luce carentum, quae nos horrifice languentis saepe sopore excierunt ne forte animas Acherunte reamur effugere aut umbras inter vivos volitare neve aliquid nostri post mortem posse relinqui, cum corpus simul atque animi natura perempta in sua discessum dederint primordia quaeque.	/ these, like films torn from the outermost surface of things, flit this way and that through the air, and these same images, meeting us when we are awake, terrify our minds, and in sleep too, when we often see strange shapes and the images of those who have lost the light, which have often roused us in horror as we lay slack in sleep— so that we should not by chance suppose that spir- its escape from Acheron, or that shades flit among the living, or that something of us can be left behind after

2 These three bracketed lines repeat lines that follow shortly. The images (simulacra) are thin films shed from the surfaces of things; entering us, they cause sight and thought.

	LATIN	ENGLISH
		death, when the body and the nature of the mind, destroyed together, have departed each into its own first beginnings.
	/ dico igitur rerum effigias tenuisque figuras mittier ab rebus summo de cortice eorum; id licet hinc quamvis hebeti cognoscere corde.	/ I say, then, that images of things, thin shapes, are sent off from things, from their outermost surface; and this anyone, however dull his wits, can grasp from what follows.
4.54	Principio quoniam mittunt in rebus apertis corpora res multae, partim diffusa solute, robora ceu fumum mittunt ignesque vaporem, et partim contexta magis condensaque, ut olim cum teretis ponunt tunicas aestate cicadae, et vituli cum membranas de corpore summo nascentes mittunt, et item cum lubrica serpens exuit in spinis vestem; nam saepe videmus illorum spoliis vepres volitantibus auctas. quae quoniam fiunt, tenuis quoque debet imago ab rebus mitti summo de corpore rerum.	First, since among visible things many things send off bodies, some loosely dispersed, as logs send off smoke and fires heat, and some more closely woven and compact, as when at times cicadas in summer lay aside their smooth sheaths, and when calves at birth shed membranes from the surface of their bodies, and likewise when the slippery snake sloughs off its skin among the thorns—for we often see the brambles decked with their fluttering spoils— since these things happen, a thin image too must be sent off from things, from their outermost surface.
	/ nam cur illa cadant magis ab rebusque recedant quam quae tenvia sunt, hiscendist nulla potestas; praesertim cum sint in summis corpora rebus multa minuta, iaci quae possint ordine eodem quo fuerint et formai servare figuram, et multo citius, quanto minus indupediri pauca queunt et [quae] sunt prima fronte locata. nam certe iacere ac largiri multa videmus, non solum ex alto penitusque, ut diximus ante, verum de summis ipsum quoque saepe colorem. et volgo faciunt id lutea russaque vela et ferrugina, cum magnis intenta theatris per malos volgata trabesque trementia flutant; namque ibi consessum caveai supter et omnem scaenai speciem patrum matrumque deorsum inficiunt coguntque suo fluitare colore.	/ For why those things should fall away and depart from things rather than those that are thin, no one can open his mouth to say; especially since on the surface of things there are many tiny bodies which could be thrown off in the same order they held before, and keep the outline of the form, and much faster, inasmuch as they are less easily hindered, being few and placed in the very front rank. For certainly we see many things thrown off and freely given out, not only from deep within, as we said before, but often from the surface too—color itself. And this is commonly done by the yellow and red awnings and the dusky purple ones, when, stretched over great theaters, spread out on masts and beams, they quiver and flap; for there they tint the seated audience in the tiers

	LATIN	ENGLISH
		below and the whole look of the stage, the senators and matrons down below, and make them ripple in their own color.
	/ et quanto circum mage sunt inclusa theatri moenia, tam magis haec intus perfusa lepore omnia conrident correpta luce diei. ergo lintea de summo cum corpore fucum mittunt, effigias quoque debent mittere tenvis res quaeque, ex summo quoniam iaculantur utraque. sunt igitur iam formarum vestigia certa, quae volgo volitant subtili praedita filo nec singillatim possunt secreta videri.	/ And the more the walls of the theater are closed in all around, the more everything inside, steeped in charm, laughs with color as the daylight is shut out. Therefore, since the canvas sends off dye from its surface, all things must also send off thin images, since in both cases they throw them from the surface. There are, then, sure traces of forms, which fly about everywhere, endowed with a fine texture, and cannot be seen one by one, apart.
4.90	Praeterea omnis odor fumus vapor atque aliae res consimiles ideo diffusae rebus abundant, ex alto quia dum veniunt extrinsecus ortae scinduntur per iter flexum, nec recta viarum ostia sunt, qua contendant exire coortae. at contra tenuis summi membrana coloris cum iacitur, nihil est quod eam discerpere possit, in promptu quoniam est in prima fronte locata.	Besides, every smell, smoke, heat and other such things stream out of things in scattered form, because, arising deep within, as they come out they are split up along the winding path, and there are no straight doorways for them to struggle out through once they have arisen. But on the other hand, when the thin film of surface color is thrown off, there is nothing that can tear it apart, since it lies ready, placed in the front rank.
4.98	Postremo speculis in aqua splendoreque in omni quae cumque apparent nobis simulacra, necessest, quandoquidem simili specie sunt praedita rerum, exin imaginibus missis consistere eorum. [nam cur illa cadant magis ab rebusque recedant] [quam quae tenuia sunt, hiscendist nulla potestas.] sunt igitur tenues formarum illis similesque effigiae, singillatim quas cernere nemo cum possit, tamen adsiduo crebroque repulsu reiectae reddunt speculorum ex aequore visum, nec ratione alia servari posse videntur, tanto opere ut similes reddantur cuique figurae.	Lastly, whatever images appear to us in mirrors, in water, and in every shining surface must, since they are endowed with an appearance like that of things, consist of images sent off from those things. [For why those things should fall away and depart from things] [rather than those that are thin, no one can open his mouth to say.] There are, then, thin images, like those things in form, which, though no one can make them out singly, yet, thrown back by constant, repeated rebound, give back a sight from the mirror's level surface; and by no other means, it seems, could they be preserved so well that shapes so like each thing are given back.

	LATIN	ENGLISH
4.110	Nunc age, quam tenui natura constet imago percipe. et in primis, quoniam primordia tantum sunt infra nostros sensus tantoque minora quam quae primum oculi coeptant non posse tueri, nunc tamen id quoque uti confirmem, exordia rerum cunctarum quam sint subtilia percipe paucis. primum animalia sunt iam partim tantula, quorum tertia pars nulla possit ratione videri. horum intestinum quodvis quale esse putandumst! quid cordis globus aut oculi? quid membra? quid artus? quantula sunt! quid praeterea primordia quaeque, unde anima atque animi constet natura necessumst, nonne vides quam sint subtilia quamque minuta?	Now come: how fine the stuff of which an image is made— grasp that. And first, since the first beginnings lie so far below our senses, and are so much smaller than the things our eyes first begin to be unable to see, still, to confirm this too, learn in a few words how fine are the beginnings of all things. First, there are creatures so tiny that a third of them could by no means be seen. What must we think any one of their guts is like! What of the ball of the heart, or the eyes? The limbs? The joints? How tiny they are! And what, further, of the first beginnings, whatever they are, of which their spirit and the nature of their mind must consist? Do you not see how fine they are, and how minute?
	/ praeterea quaecumque suo de corpore odorem expirant acrem, panaces absinthia taetra habrotonique graves et tristia centaurea, quorum unum quidvis leviter si forte duobus ... quin potius noscas rerum simulacra vagari multa modis multis, nulla vi cassaque sensu?	/ Besides, all things that breathe out a pungent smell from their bodies—all-heal, foul wormwood, strong-smelling southernwood and bitter centaury— any one of which, if you should chance lightly between two ... Why not rather recognize that many images of things wander in many ways, powerless and beyond the reach of sense?
4.129	Sed ne forte putes ea demum sola vagari, quae cumque ab rebus rerum simulacra recedunt, sunt etiam quae sponte sua gignuntur et ipsa constituuntur in hoc caelo, qui dicitur aer, quae multis formata modis sublime feruntur, ut nubes facile inter dum concrescere in alto cernimus et mundi speciem violare serenam aëra mulcentes motu; nam saepe Gigantum ora volare videntur et umbram ducere late, inter dum magni montes avolsaque saxa montibus ante ire et solem succedere praeter, inde alios trahere atque inducere belua nimbos. nec speciem mutare suam liquentia cessant et cuiusque modi formarum vertere in oras.	But lest you think that only those images of things wander that depart from things, there are also some that are born of their own accord and form by themselves in this part of the sky that is called air; these, shaped in many ways, are carried aloft, as we sometimes see clouds easily gather on high and mar the clear face of the heavens, caressing the air with their motion; for often the faces of Giants seem to fly by and trail a broad shadow, sometimes great mountains and rocks torn from the mountains seem to go before and pass across the sun, then some monster seems to drag and draw on

	LATIN	ENGLISH
		other clouds. And, melting, they never stop changing their appearance and turning into the outlines of every kind of form.
4.143	Nunc ea quam facili et celeri ratione genantur perpetuoque fluant ab rebus lapsaque cedant ... semper enim summum quicquid de rebus abundat, quod iaculentur. et hoc alias cum pervenit in res, transit, ut in primis vestem; sed ubi aspera saxa aut in materiam ligni pervenit, ibi iam scinditur, ut nullum simulacrum reddere possit. at cum splendida quae constant opposta fuerunt densaque, ut in primis speculum est, nihil accidit horum; nam neque, uti vestem, possunt transire, neque autem scindi; quam meminit levor praestare salutem. qua propter fit ut hinc nobis simulacra redundent.	Now how easily and swiftly they are produced, and flow constantly from things, and slip away and withdraw— ... for there is always something on the surface of things in abundance for them to shoot off. And when this reaches other things, it passes through—clothing, for example; but when it reaches rough rocks or the matter of wood, there straightaway it is torn apart, so that it can give back no image. But when bright and dense objects have been placed in its way—a mirror above all—none of this happens; for they cannot pass through, as through clothing, nor yet be torn apart; the smoothness takes care to keep them safe. That is why images stream back to us from there.
	/ et quamvis subito quovis in tempore quamque rem contra speculum ponas, apparet imago; perpetuo fluere ut noscas e corpore summo texturas rerum tenuis tenuisque figuras. ergo multa brevi spatio simulacra genuntur, ut merito celer his rebus dicatur origo. et quasi multa brevi spatio summittere debet lumina sol, ut perpetuo sint omnia plena, sic ab rebus item simili ratione necessest temporis in puncto rerum simulacra ferantur multa modis multis in cunctas undique partis; quandoquidem speculum quo cumque obvertimus oris, res ibi respondent simili forma atque colore.	/ And however suddenly, at whatever moment, you place any thing before a mirror, an image appears; so you may know that from the surface there flow unceasingly thin textures of things and thin shapes. Therefore many images are produced in a short time, so that their origin may rightly be called swift. And just as the sun must send up much light in a short time, so that all things may constantly be full of it, so likewise, by similar reasoning, from things many images of things must be carried in an instant in many ways, in all directions everywhere; since wherever we turn a mirror to face, there things answer it with like form and color.
4.168	Praeterea modo cum fuerit liquidissima caeli tempestas, perquam subito fit turbida foede, undique uti tenebras omnis Acherunta rearis liquisse et magnas caeli complesse cavernas.	Besides, when the weather of the sky has just been perfectly clear, all of a sudden it becomes foully overcast, so that you would think all the darkness had

	LATIN	ENGLISH
	usque adeo taetra nimborum nocte coorta inpendent atrae Formidinis ora superne; quorum quantula pars sit imago dicere nemost qui possit neque eam rationem reddere dictis.	deserted Acheron on every side and filled the great caverns of the sky. So thoroughly, when the foul night of storm clouds has risen, do the faces of black Terror hang over us from above; yet how tiny a part of these an image is, no one can say, nor render an account of it in words.
4.176	Nunc age, quam celeri motu simulacra ferantur, et quae mobilitas ollis tranantibus auras reddita sit, longo spatio ut brevis hora teratur, in quem quaeque locum diverso numine tendunt, suavidicis potius quam multis versibus edam; parvus ut est cycni melior canor, ille gruum quam clamor in aetheriis dispersus nubibus austri.	Now come: how swift the motion with which images travel, and what speed has been given them as they swim through the air, so that a brief hour is spent on a long journey, to whatever place each heads with its varying impulse, I shall tell in verses sweet rather than many; as the swan's brief song is better than the cry of cranes scattered among the lofty clouds of the south wind.
4.183	Principio persaepe levis res atque minutis corporibus factas celeris licet esse videre. in quo iam genere est solis lux et vapor eius, propterea quia sunt e primis facta minutis, quae quasi cuduntur perque aëris intervallum non dubitant transire sequenti concita plaga; suppeditatur enim confestim lumine lumen et quasi protelo stimulatur fulgere fulgur. qua propter simulacra pari ratione necessest inmemorabile per spatium transcurrere posse temporis in puncto, primum quod parvola causa est procul a tergo quae provehat atque propellat, quod super est, ubi tam volucri levitate ferantur, deinde quod usque adeo textura praedita rara mittuntur, facile ut quasvis penetrare queant res et quasi permanare per aëris intervallum.	First, you can very often see that things that are light and made of tiny bodies are swift. Of this kind are the sun's light and its heat, because they are made of tiny first bodies, which are, so to speak, hammered on, and do not hesitate to cross the space of air, driven by the blow behind; for light is instantly supplied by light, and flash spurred on by flash, as in an unbroken line. Therefore by like reasoning images must be able to run across an unspeakable distance in an instant of time: first, because a tiny cause far behind them carries them on and propels them, and for the rest, they are borne along with such winged lightness; next, because they are sent out endowed with so loose a texture that they can easily pass into anything and, as it were, seep through the space of air.
4.199	Praeterea si quae penitus corpuscula rerum ex altoque foras mittuntur, solis uti lux ac vapor, haec puncto cernuntur lapsa diei per totum caeli spatium diffundere sese	Besides, if some particles of things sent out from deep within to the outside, like the sun's light and heat, are seen in an instant of the day to glide

	LATIN	ENGLISH
	perque volare mare ac terras caelumque rigare. quid quae sunt igitur iam prima fronte parata, cum iaciuntur et emissum res nulla moratur? quone vides citius debere et longius ire multiplexque loci spatium transcurrere eodem tempore quo solis pervolgant lumina caelum?	down and spread themselves through the whole expanse of the sky, and to fly over sea and lands and flood the sky, what then of those that stand ready in the front rank, when they are thrown off and nothing holds back their release? Do you not see how much faster and farther they must go, and run through many times the space in the same time that the sun's rays spread across the sky?
4.209	Hoc etiam in primis specimen verum esse videtur, quam celeri motu rerum simulacra ferantur, quod simul ac primum sub diu splendor aquai ponitur, extemplo caelo stellante serena sidera respondent in aqua radiantia mundi. iamne vides igitur quam puncto tempore imago aetheris ex oris in terrarum accidat oras? quare etiam atque etiam mitti fateare necessest corpora quae feriant oculos visumque lacessant. perpetuoque fluunt certis ab rebus odores, frigus ut a fluviis, calor ab sole, aestus ab undis aequoris, exesor moerorum litora circum, nec variae cessant voces volitare per auras. denique in os salsi venit umor saepe saporis, cum mare versamur propter, dilutaque contra cum tuimur misceri absinthia, tangit amaror.	This too seems an especially true proof of how swift the motion is with which images of things travel: that as soon as a shining pool of water is set out under the open sky, at once, if the sky is starry, the clear stars of the heavens answer, gleaming in the water. Do you see now, then, in what an instant an image falls from the borders of the sky to the borders of the earth? So again and again you must admit that bodies are sent off that strike the eyes and provoke sight. And smells flow constantly from certain things, as cold from rivers, heat from the sun, spray from the waves of the sea, which eats away walls along the shores, and various sounds never cease to fly through the air. Then, a moist salty taste often comes into the mouth when we walk beside the sea; and when we watch, close by, wormwood being diluted and mixed, its bitterness touches us.
	/ usque adeo omnibus ab rebus res quaeque fluenter fertur et in cunctas dimittitur undique partis nec mora nec requies interdatur ulla fluendi, perpetuo quoniam sentimus et omnia semper cernere odorari licet et sentire sonare.	/ So true is it that from all things each thing is carried off in a flow and sent out in all directions everywhere, and no delay or rest from flowing is granted, since we feel constantly, and can always see and smell all things, and hear them sound.
4.230	Praeterea quoniam manibus tractata figura in tenebris quaedam cognoscitur esse eadem quae cernitur in luce et claro candore, necessest	Besides, since a shape handled in the dark is recognized as the same one that is seen in the light and bright radiance,

	LATIN	ENGLISH
	consimili causa tactum visumque moveri. nunc igitur si quadratum temptamus et id nos commovet in tenebris, in luci quae poterit res accidere ad speciem quadrata, nisi eius imago? esse in imaginibus qua propter causa videtur cernundi neque posse sine his res ulla videri.	touch and sight must be moved by a like cause. Now then, if we feel a square thing, and it affects us in the dark, what square thing will be able in the light to strike our sight, unless its image? So the cause of seeing seems to lie in images, and without them nothing can be seen.
4.239	Nunc ea quae dico rerum simulacra feruntur undique et in cunctas iaciuntur didita partis; verum nos oculis quia solis cernere quimus, propterea fit uti, speciem quo vertimus, omnes res ibi eam contra feriant forma atque colore. et quantum quaeque ab nobis res absit, imago efficit ut videamus et internoscere curat; nam cum mittitur, extemplo protrudit agitque aëra qui inter se cumque est oculosque locatus, isque ita per nostras acies perlabitur omnis et quasi perterget pupillas atque ita transit. propterea fit uti videamus quam procul absit res quaeque. et quanto plus aëris ante agitatur et nostros oculos perterget longior aura, tam procul esse magis res quaeque remota videtur.	Now these images of things I speak of are carried everywhere and are thrown off, scattered, in all directions; but because we can see only with our eyes, it happens that wherever we turn our gaze, all things there strike against it with form and color. And how far each thing is from us, the image makes us see, and takes care that we distinguish it; for when it is sent off, it at once pushes and drives whatever air lies between itself and the eyes, and all that air thus glides through our eyes and, as it were, brushes the pupils, and so passes through. That is why we see how far away each thing is. And the more air is driven on ahead, and the longer the breeze that brushes our eyes, the farther away each thing is seen to be.
	/ scilicet haec summe celeri ratione geruntur, / quale sit ut videamus, et una quam procul absit.	/ Of course, these things happen with the utmost swiftness, / so that we see what a thing is like, and at once how far away it is.
4.256	Illud in his rebus minime mirabile habendumst, cur, ea quae feriant oculos simulacra videri singula cum nequeant, res ipsae perspiciantur. ventus enim quoque paulatim cum verberat et cum acre fluit frigus, non privam quamque solemus particulam venti sentire et frigoris eius, sed magis unorsum, fierique perinde videmus corpore tum plagas in nostro tam quam aliquae res verberet atque sui det sensum corporis extra. praeterea lapidem digito cum tundimus, ipsum tangimus extremum saxi summumque colorem nec sentimus eum tactu, verum magis ipsam duritiem penitus saxi sentimus in alto.	In these matters we must not think it at all surprising that, though the images that strike the eyes cannot be seen one by one, the things themselves are perceived. For when the wind too lashes us bit by bit, and when sharp cold flows, we do not usually feel each single particle of that wind and of that cold, but rather the whole at once, and we perceive blows being dealt to our body then, just as if some thing were lashing it and giving us a sense of its own body outside us. Besides, when we strike a stone with a finger, we touch the very outermost part of the rock and its surface color,

	LATIN	ENGLISH
		yet we do not feel that by touch; rather we feel the hardness itself of the rock, deep within.

MIRRORS

How images make things seem to stand behind a mirror and reverse left and right.

	LATIN	ENGLISH
4.269	Nunc age, cur ultra speculum videatur imago percipe: nam certe penitus remota videtur. quod genus illa foris quae vere transpiciuntur, ianua cum per se transpectum praebet apertum, multa facitque foris ex aedibus ut videantur; is quoque enim duplici geminoque fit aëre visus. primus enim citra postes tum cernitur aër, inde fores ipsae dextra laevaque secuntur, post extraria lux oculos perterget et aër alter, et illa foris quae vere transpiciuntur.	Now come, learn why the image is seen beyond the mirror: for certainly it seems set far back within. It is like those things outside that are truly seen through a door, when the doorway offers an open view through it and lets many things outside be seen from the house; for that sight too is produced by a double, twofold air. First the air on this side of the doorposts is perceived, then the doors themselves follow, right and left, then the light from outside brushes the eyes, and the second air, and the things outside that are truly seen through.
	/ sic ubi se primum speculi proiecit imago, dum venit ad nostras acies, protrudit agitque aëra qui inter se cumquest oculosque locatus, et facit, ut prius hunc omnem sentire queamus quam speculum; sed ubi [in] speculum quoque sensimus ipsum, continuo a nobis in eum quae fertur imago pervenit, et nostros oculos reiecta revisit atque alium prae se propellens aëra volvit, et facit ut prius hunc quam se videamus, eoque distare ab speculo tantum semota videtur. quare etiam atque etiam minime mirarier est par ... illis quae reddunt speculorum ex aequore visum, aëribus binis quoniam res confit utraque.	/ So, when the mirror's image first sends itself forth, as it comes to our eyes, it pushes and drives whatever air lies between itself and the eyes, and makes us able to perceive all that air before the mirror; but when we have perceived the mirror itself too, at once the image that travels from us to it arrives, and, thrown back, returns to our eyes, and rolls another air before it, pushing it on, and makes us see this air before itself, and so it seems to stand back that far from the mirror. So again and again it is not at all fitting to wonder ... at those things that give back a sight from the mirror's level surface, since in both cases the effect comes about through two airs.
4.292	Nunc ea quae nobis membrorum dextera pars est, in speculis fit ut in laeva videatur eo quod planitiem ad speculi veniens cum offendit imago, non convertitur incolumis, sed recta retrorsum sic eliditur, ut siquis, prius arida quam sit cretea persona, adlidat pilaeve trabive,	Now, the part of our body that is on the right appears in mirrors on the left, because, when the image, coming to the mirror's flat surface, strikes it, it is not turned around intact, but is pushed straight

	LATIN	ENGLISH
	atque ea continuo rectam si fronte figuram servet et elisam retro sese exprimat ipsa. fiet ut, ante oculus fuerit qui dexter, ut idem nunc sit laevus et e laevo sit mutua dexter.	back, as if someone, before a plaster mask were dry, should dash it against a pillar or beam, and it at once kept its shape straight on the front and pressed itself out, thrust backward. It will happen that the eye which was before the right is now the left, and the left in exchange the right.
4.302	Fit quoque de speculo in speculum ut tradatur imago, quinque etiam [aut] sex ut fieri simulacra suërint. nam quae cumque retro parte interiore latebunt, inde tamen, quamvis torte penitusque remota, omnia per flexos aditus educta licebit pluribus haec speculis videantur in aedibus esse. usque adeo speculo in speculum translucet imago, et cum laeva data est, fit rusum ut dextera fiat, inde retro rursum redit et convertit eodem.	It happens too that an image is passed from mirror to mirror, so that even five or six images are commonly produced. For whatever things lie hidden behind, in the inner part, from there, however tortuously and deeply removed, all can be drawn out through winding passages, and by means of several mirrors be seen to be in the house. So thoroughly does the image shine across from mirror to mirror; and when it is given as left, it becomes right again, then turns back once more and reverts to the same position.
4.311	Quin etiam quae cumque latuscula sunt speculorum adsimili lateris flexura praedita nostri, dextera ea propter nobis simulacra remittunt, aut quia de speculo in speculum transfertur imago, inde ad nos elisa bis advolat, aut etiam quod circum agitur, cum venit, imago propterea quod flexa figura docet speculi convertier ad nos.	What is more, all mirrors with little sides that have a curve like the curve of our own flank send images back to us the right way round, either because the image is passed from mirror to mirror and flies to us after being struck back twice, or else because the image is turned around as it comes, since the mirror's curved shape teaches it to turn toward us.
4.318	Indugredi porro pariter simulacra pedemque ponere nobiscum credas gestumque imitari propterea quia, de speculi qua parte recedas, continuo nequeunt illinc simulacra reverti; omnia quandoquidem cogit natura referri ac resilire ab rebus ad aequos reddita flexus.	Then again, you would think the images step along with us, set their feet down as we do and copy our gestures, because from whatever part of the mirror you move away, from there the images at once cannot return; since nature compels all things to be carried back and to rebound from things, returned at equal angles.
4.324	Splendida porro oculi fugitant vitantque tueri. sol etiam caecat, contra si tendere pergas, propterea quia vis magnast ipsius et alte aëra per purum simulacra feruntur et feriunt oculos turbantia composituras.	Again, the eyes shun bright things and avoid looking at them. The sun even blinds them if you keep straining toward it, because its own power is great, and from on high

	LATIN	ENGLISH
		its images are carried through the clear air and strike the eyes, throwing their structure into disorder.
4.329	Praeterea splendor qui cumque est acer adurit saepe oculos ideo quod semina possidet ignis multa, dolorem oculis quae gignunt insinuando. lurida praeterea fiunt quae cumque tuentur arquati, quia luroris de corpore eorum semina multa fluunt simulacris obvia rerum, multaque sunt oculis in eorum denique mixta, quae contage sua palloribus omnia pingunt.	Besides, any sharp brightness often scorches the eyes, because it holds many seeds of fire, which breed pain in the eyes by working their way in. Besides, whatever the jaundiced look at turns sallow, because from their body many seeds of sallowness flow out to meet the images of things, and many, too, are mixed within their eyes, which by their contagion paint everything with pallor.
4.337	E tenebris autem quae sunt in luce tuemur propterea quia, cum propior caliginis aër ater init oculos prior et possedit apertos, insequitur candens confestim lucidus aër, qui quasi purgat eos ac nigras discutit umbras aëris illius; nam multis partibus hic est mobilior multisque minutior et mage pollens. qui simul atque vias oculorum luce replevit atque pate fecit, quas ante obsederat aër 〈ATER〉, continuo rerum simulacra secuntur, quae sita sunt in luce, lacessuntque ut videamus. quod contra facere in tenebris e luce nequimus propterea quia posterior caliginis aër crassior insequitur, qui cuncta foramina complet obsiditque vias oculorum, ne simulacra possint ullarum rerum coniecta moveri.	We see out of darkness the things that are in the light because, when the black air of the gloom, being nearer, enters the open eyes first and takes possession of them, the shining, bright air follows at once, which, as it were, cleanses them and scatters the black shadows of that other air; for this air is many times more mobile, many times finer and more potent. As soon as it has filled the passages of the eyes with light and opened those that the air had blocked before— the black air—at once the images of things follow that are situated in the light, and stir the eyes so that we see. We cannot do the reverse, from light into darkness, because the air of the gloom that comes after is thicker, and fills all the openings and blocks the passages of the eyes, so that the images of no things can be thrown in and move them.
4.353	Quadratasque procul turris cum cernimus urbis, propterea fit uti videantur saepe rutundae, angulus optusus quia longe cernitur omnis sive etiam potius non cernitur ac perit eius plaga nec ad nostras acies perlabitur ictus, aëra per multum quia dum simulacra feruntur, cogit hebescere eum crebris offensibus aër. hoc ubi suffugit sensum simul angulus omnis. fit quasi ut ad turnum saxorum structa tuantur;	And when we see a city's square towers from far off, it often happens that they look round, because every angle is seen blunted from afar, or rather is not seen at all: its blow is lost, and its impact does not glide through to our sight, since, while the images are carried through much air, the air forces the angle to grow dull by frequent

	LATIN	ENGLISH
	non tamen ut coram quae sunt vereque rutunda, sed quasi adumbratim paulum simulata videntur.	collisions. When in this way every angle has escaped our sense at once, the stone structures look as though turned on a lathe— yet not like things that are close at hand and truly round, but they appear to resemble them a little, as in a sketch.
4.364	Umbra videtur item nobis in sole moveri et vestigia nostra sequi gestumque imitari, aëra si credis privatum lumine posse indugredi, motus hominum gestumque sequentem; nam nihil esse potest aliud nisi lumine cassus aër id quod nos umbram perhibere suëmus. ni mirum, quia terra locis ex ordine certis lumine privatur solis qua cumque meantes officimus, repletur item quod liquimus eius, propterea fit uti videatur, quae fuit umbra corporis, e regione eadem nos usque secuta. semper enim nova se radiorum lumina fundunt primaque dispereunt, quasi in ignem lana trahatur. propterea facile et spoliatur lumine terra et repletur item nigrasque sibi abluit umbras.	Our shadow, too, seems to us to move in the sun and to follow our footsteps and copy our gestures — if you believe that air deprived of light can walk along, following the movements and gestures of men; for what we are accustomed to call a shadow can be nothing else but air empty of light. Of course: because the earth, in fixed places one after another, is robbed of the sun's light wherever, as we walk, we get in its way, and likewise the part we have left is filled again, that is why what was our body's shadow seems to have followed us constantly, directly in line with us. For new rays of light are always pouring out, and the first ones perish, as if wool were being drawn into a fire. So the earth is easily robbed of light and likewise filled again, and washes the black shadows off itself.

ILLUSIONS OF SIGHT

Moving ships, still stars and bent oars seem to deceive the eyes, but the error lies in the mind.

	LATIN	ENGLISH
4.379	Nec tamen hic oculos falli concedimus hilum. nam quo cumque loco sit lux atque umbra tueri illorum est; eadem vero sint lumina necne, umbraque quae fuit hic eadem nunc transeat illuc, an potius fiat paulo quod diximus ante, hoc animi demum ratio discernere debet, nec possunt oculi naturam noscere rerum. proinde animi vitium hoc oculis adfingere noli.	Yet we do not grant that the eyes are deceived one bit in this. For to see in what place there is light and shadow is their business; but whether the lights are the same or not, and whether the shadow that was here is the same one now passing there, or rather what I said a little earlier happens— this, in the end, the reasoning of the mind must decide; the eyes cannot know the nature of things. So do not pin this fault of the mind on the eyes.

	LATIN	ENGLISH
4.387	Qua vehimur navi, fertur, cum stare videtur; quae manet in statione, ea praeter creditur ire. et fugere ad puppim colles campique videntur, quos agimus praeter navem velisque volamus.	The ship we sail in moves while it seems to stand still; the one that stays at anchor is believed to be going past. And hills and plains seem to run away astern as we drive our ship past them and fly on under sail.
4.391	Sidera cessare aetheriis adfixa cavernis cuncta videntur, et adsiduo sunt omnia motu, quandoquidem longos obitus exorta revisunt, cum permensa suo sunt caelum corpore claro. solque pari ratione manere et luna videtur in statione, ea quae ferri res indicat ipsa.	The stars all seem to be at rest, fixed to the vaults of heaven, and yet they are all in constant motion, since they rise and then return to their distant settings when they have measured out the sky with their bright bodies. And by the same reasoning the sun and moon seem to stay at rest—things that the facts themselves show to be moving.
4.397	Exstantisque procul medio de gurgite montis classibus inter quos liber patet exitus ingens, insula coniunctis tamen ex his una videtur. atria versari et circum cursare columnae usque adeo fit uti pueris videantur, ubi ipsi desierunt verti, vix ut iam credere possint non supra sese ruere omnia tecta minari.	And mountains rising far off from the middle of the sea, between which a vast passage lies open, free for fleets, nevertheless look like a single island joined from them. Halls seem to spin and columns to run around to children, so much so, when they themselves have stopped whirling, that they can scarcely believe the whole roof is not threatening to crash down on them.
4.404	Iamque rubrum tremulis iubar ignibus erigere alte cum coeptat natura supraque extollere montes, quos tibi tum supra sol montis esse videtur comminus ipse suo contingens fervidus igni, vix absunt nobis missus bis mille sagittae, vix etiam cursus quingentos saepe veruti; inter eos solemque iacent immania ponti aequora substrata aetheriis ingentibus oris, interiectaque sunt terrarum milia multa, quae variae retinent gentes et saecla ferarum.	And when nature begins to raise the red radiance on high with its trembling fires and lift it above the mountains, those mountains above which the sun then seems to you to be, touching them close at hand with its own blazing fire, are scarcely two thousand arrow-shots away from us, often scarcely five hundred casts of a javelin; yet between them and the sun lie the enormous plains of the sea, spread out beneath the vast shores of the sky, and many thousands of lands lie in between, held by various peoples and generations of beasts.

	LATIN	ENGLISH
4.414	At coniectus aquae digitum non altior unum, qui lapides inter sistit per strata viarum, despectum praebet sub terras inpete tanto, a terris quantum caeli patet altus hiatus, nubila despicere et caelum ut videare videre, corpora mirande sub terras abdita caelo.	But a pool of water no deeper than a single finger, collected between the stones of paved streets, offers a view down beneath the earth of as vast a depth as the high chasm of the sky gapes open above the earth, so that you seem to look down on clouds and see the sky, and bodies marvelously hidden in a sky beneath the earth.
4.420	Denique ubi in medio nobis ecus acer obhaesit flumine et in rapidas amnis despeximus undas, stantis equi corpus transversum ferre videtur vis et in adversum flumen contrudere raptim, et quo cumque oculos traiecimus omnia ferri et fluere adsimili nobis ratione videntur.	Lastly, when our spirited horse has come to a halt in the middle of a river, and we look down into the stream's rushing waves, the force of the current seems to carry the standing horse's body sideways and to thrust it swiftly upstream, and wherever we cast our eyes, everything seems to be carried and to flow along in the same way as we are.
4.426	Porticus aequali quamvis est denique ductu stansque in perpetuum paribus suffulta columnis, longa tamen parte ab summa cum tota videtur, paulatim trahit angusti fastigia coni, tecta solo iungens atque omnia dextera laevis donec in obscurum coni conduxit acumen.	Lastly, though a colonnade runs evenly throughout and stands forever propped on equal columns, yet when its whole length is seen from the top end, it gradually draws in to the point of a narrow cone, joining roof to floor and all the right side to the left, until it has drawn them together into the cone's faint tip.
4.432	In pelago nautis ex undis ortus in undis sol fit uti videatur obire et condere lumen; quippe ubi nil aliud nisi aquam caelumque tuentur; ne leviter credas labefactari undique sensus. at maris ignaris in portu clauda videntur navigia aplustris fractis obnitier undis. nam quae cumque supra rorem salis edita pars est remorum, recta est, et recta superne guberna; quae demersa liquore obeunt, refracta videntur omnia converti sursumque supina reverti et reflexa prope in summo fluitare liquore.	At sea, to sailors, the sun seems to rise from the waves and in the waves to set and hide its light— naturally, since they see nothing else but water and sky; so do not lightly believe that the senses are shaken on every side. But to those who do not know the sea, ships in harbor seem to be straining lamely against the waves with broken sterns. For whatever part of the oars is raised above the salt spray is straight, and the rudders are straight above; but the parts that go down beneath the water all seem refracted, bent round, turning back and sloping upward,

	LATIN	ENGLISH
		and bent back so as almost to float on the water's surface.
4.443	Raraque per caelum cum venti nubila portant tempore nocturno, tum splendida signa videntur labier adversum nimbos atque ire superne longe aliam in partem ac vera ratione feruntur At si forte oculo manus uni subdita supter pressit eum, quodam sensu fit uti videantur omnia quae tuimur fieri tum bina tuendo, bina lucernarum florentia lumina flammis binaque per totas aedis geminare supellex et duplicis hominum facies et corpora bina.	And when the winds carry scattered clouds across the sky at night, then the bright constellations seem to glide against the clouds and travel above them in quite another direction from their true course. But if by chance a hand placed beneath one eye presses it, by a certain sensation it comes about that everything we look at seems to become double as we look: double the lamplights, blooming with their flames, double the furniture throughout the whole house, and men's faces twofold, and their bodies two.
4.453	Denique cum suavi devinxit membra sopore somnus et in summa corpus iacet omne quiete, tum vigilare tamen nobis et membra movere nostra videmur, et in noctis caligine caeca cernere censemus solem lumenque diurnum, conclusoque loco caelum mare flumina montis mutare et campos pedibus transire videmur, et sonitus audire, severa silentia noctis undique cum constent, et reddere dicta tacentes.	Lastly, when sleep has bound our limbs in sweet slumber and the whole body lies in deepest rest, even then we seem to ourselves to be awake and to move our limbs, and in the blind darkness of night we think we see the sun and the light of day, and, shut in a closed room, we seem to pass to sky and sea, to rivers and mountains, and to cross the plains on foot, and to hear sounds, when the stern silence of night reigns on every side, and to reply, though we say nothing.
4.462	Cetera de genere hoc mirande multa videmus, quae violare fidem quasi sensibus omnia quaerunt, ne quiquam, quoniam pars horum maxima fallit propter opinatus animi, quos addimus ipsi, pro visis ut sint quae non sunt sensibus visa; nam nihil aegrius est quam res secernere apertas ab dubiis, animus quas ab se protinus addit.	We see many other marvels of this kind, which all seek, as it were, to break down our trust in the senses— in vain, since most of them deceive us because of the mind's opinions, which we add ourselves, so that things not seen by the senses are taken as seen; for nothing is harder than to separate plain things from doubtful ones, which the mind adds straight away of its own accord.

AGAINST THE SKEPTIC

Whoever says nothing can be known refutes himself; the senses are the foundation of all knowledge.

	LATIN	ENGLISH
4.469		

	LATIN	ENGLISH
	Denique nil sciri siquis putat, id quoque nescit an sciri possit, quoniam nil scire fatetur. hunc igitur contra minuam contendere causam, qui capite ipse suo in statuit vestigia sese. et tamen hoc quoque uti concedam scire, at id ipsum quaeram, cum in rebus veri nil viderit ante, unde sciat quid sit scire et nescire vicissim, notitiam veri quae res falsique crearit et dubium certo quae res differre probarit. invenies primis ab sensibus esse creatam notitiem veri neque sensus posse refelli. nam maiore fide debet reperirier illud, sponte sua veris quod possit vincere falsa. quid maiore fide porro quam sensus haberi debet?	Lastly, if anyone thinks that nothing can be known, he also does not know whether it can be known, since he admits he knows nothing. Against this man, then, I will not trouble to argue my case, a man who has stood himself on his own head. And yet, granting that he knows even this, still I would ask him this: since he has never before seen any- thing true in things, how does he know what knowing and not know- ing are, what produced the concept of the true and the false, and what proved that the doubtful differs from the certain? You will find that the concept of the true was cre- ated first by the senses, and that the senses cannot be re- futed. For something must be found of greater credit, which can of its own accord overcome the false with the true. Then what ought to be held of greater credit than the senses?
	an ab sensu falso ratio orta valebit dicere eos contra, quae tota ab sensibus orta est? qui nisi sunt veri, ratio quoque falsa fit omnis.	Or will reasoning, sprung from a false sense, be able to speak against them, when it has sprung wholly from the senses? If they are not true, all reasoning too becomes false.
4.486	An poterunt oculos aures reprehendere, an aures tactus? an hunc porro tactum sapor arguet oris, an confutabunt nares oculive revincent? non, ut opinor, ita est. nam seorsum cuique potestas divisast, sua vis cuiquest, ideoque necesse est et quod molle sit et gelidum fervensve videre et seorsum varios rerum sentire colores et quae cumque coloribus sint coniuncta necessest. seorsus item sapor oris habet vim, seorsus odores nascuntur, seorsum sonitus. ideoque necesse est non possint alios alii convincere sensus. nec porro poterunt ipsi reprehendere sese, aequa fides quoniam debebit semper haberi. proinde quod in quoquest his visum tempore, verumst.	Can the ears find fault with the eyes, or touch with the ears? Or will the mouth's taste convict this touch, or will the nostrils refute it, or the eyes disprove it? Not so, I think. For to each a separate power is assigned, each has its own force; and so it must be that what is soft, or cold, or hot is perceived by one sense, and by another the various colors of things are sensed, and whatever is joined to the colors. Separately, too, the mouth's taste has its power; separately smells arise, separately sounds. And so it must be that one sense cannot convict another. Nor again can they find fault with themselves,

	LATIN	ENGLISH
		since equal trust must always be placed in them. Therefore, whatever has appeared to them at any time is true.
4.500	Et si non poterit ratio dissolvere causam, cur ea quae fuerint iuxtim quadrata, procul sint visa rutunda, tamen praestat rationis egentem reddere mendose causas utriusque figurae, quam manibus manifesta suis emittere quoquam et violare fidem primam et convellere tota fundamenta quibus nixatur vita salusque. non modo enim ratio ruat omnis, vita quoque ipsa concidat extemplo, nisi credere sensibus ausis praecipitisque locos vitare et cetera quae sint in genere hoc fugienda, sequi contraria quae sint. illa tibi est igitur verborum copia cassa omnis, quae contra sensus instructa paratast.	And even if reasoning cannot unravel the cause why things that were square close up are seen as round from far off, still it is better, lacking a reason, to give a faulty account of the causes of each shape than to let things plainly grasped slip from our hands and to violate our first trust and tear up all the foundations on which life and well-being rest. For not only would all reasoning collapse; life itself too would fall at once, unless you dared to trust the senses and to avoid steep places and all the other things of this kind that are to be shunned, and to pursue their opposites. So all that store of words is empty for you, which has been drawn up and prepared against the senses.
4.513	Denique ut in fabrica, si pravast regula prima, normaque si fallax rectis regionibus exit, et libella aliqua si ex parti claudicat hilum, omnia mendose fieri atque obstipa necessu est prava cubantia prona supina atque absona tecta, iam ruere ut quaedam videantur velle, ruantque prodita iudiciis fallacibus omnia primis, sic igitur ratio tibi rerum prava necessest falsaque sit, falsis quae cumque ab sensibus ortast.	Lastly, as in a building, if the first rule is crooked, and if the square is false and departs from straight lines, and if the level is the least bit off at any point, everything must be done faulty and askew, the building warped, leaning, tilting forward, tilting back, all out of true, so that some parts seem about to collapse already, and do collapse, all betrayed by those first false judgments— so, then, your reasoning about things must be crooked and false, whatever reasoning has arisen from false senses.

HEARING, TASTE AND SMELL

Voice is bodily, echoes are voices thrown back, and flavors and smells please or harm by their shapes.

	LATIN	ENGLISH
4.522	Nunc alii sensus quo pacto quisque suam rem / sentiat, haud quaquam ratio scruposa relicta est.	Now how each of the other senses perceives its own / object—the account that remains is by no means a stony path.
4.524	Principio auditur sonus et vox omnis, in auris insinuata suo pepulere ubi corpore sensum.	First, every sound and voice is heard when it has worked its way into the ears and struck the sense with its body.

	LATIN	ENGLISH
	corpoream quoque enim [vocem] constare fatendumst et sonitum, quoniam possunt inpellere sensus.	For we must admit that voice too, and sound, are bodily, since they can strike the senses.
4.528	Praeterea radit vox fauces saepe facitque asperiora foras gradiens arteria clamor, quippe per angustum turba maiore coorta ire foras ubi coeperunt primordia vocum. scilicet expletis quoque ianua raditur oris. haud igitur dubiumst quin voces verbaque constent corporeis e principiis, ut laedere possint. nec te fallit item quid corporis auferat et quid detrahat ex hominum nervis ac viribus ipsis perpetuus sermo nigrai noctis ad umbram aurorae perductus ab exoriente nitore, praesertim si cum summost clamore profusus. ergo corpoream vocem constare necessest, multa loquens quoniam amittit de corpore partem.	Besides, the voice often scrapes the throat, and a shout makes the windpipe rougher as it goes out, since the first beginnings of voices, rising in a greater crowd through a narrow passage, have begun to go outside. Clearly, the doorway of the mouth, too, is scraped when they fill it. There is no doubt, then, that voices and words consist of bodily first beginnings, so that they can do harm. Nor do you fail to see, likewise, how much body is taken away, how much is drained from men's very sinews and strength by unbroken talk carried on to the shadow of black night from the first bright gleam of dawn, especially if it is poured out at the top of one's voice. So the voice must be bodily, since one who talks a lot loses part of his body.
4.542	Asperitas autem vocis fit ab asperitate principiorum et item levor levore creatur; nec simili penetrant auris primordia forma, cum tuba depresso graviter sub murmure mugit et reboat raucum retro cita barbita bombum, et [iam] Dauliades natae hortis ex Heliconis cum liquidam tollunt lugubri voce querellam.	Roughness of voice, moreover, comes from roughness of the first beginnings, and smoothness likewise is created from smoothness; nor do first beginnings of the same shape pierce the ears when the trumpet bellows with a low, deep rumble and the lyre, swept into motion, booms back its hoarse drone, and when now the Daulian birds from Helicon's gardens raise their liquid lament in a mournful voice.[3]
4.549	Hasce igitur penitus voces cum corpore nostro exprimimus rectoque foras emittimus ore, mobilis articulat nervorum daedala lingua, formaturaque labrorum pro parte figurat. hoc ubi non longum spatiumst unde illa profecta perveniat vox quaeque, necessest verba quoque ipsa plane exaudiri discernique articulatim;	So when we press out these voices from deep within our body and send them out straight through the mouth, the nimble tongue, deft worker of the sinews, articulates them, and the shaping of the lips in its turn gives them form.

3 The Daulian birds are nightingales, after Procne and Philomela of Daulis, who in myth were turned into birds.

	LATIN	ENGLISH
	servat enim formaturam servatque figuram. at si inter positum spatium sit longius aequo, aëra per multum confundi verba necessest et conturbari vocem, dum transvolat auras. ergo fit, sonitum ut possis sentire neque illam internoscere, verborum sententia quae sit; usque adeo confusa venit vox inque pedita.	When the distance is not long from which each voice sets out to arrive, the words themselves too must be heard clearly and distinguished syllable by syllable; for the voice keeps its shaping, keeps its form. But if the space between is longer than it should be, the words must be jumbled through so much air and the voice thrown into confusion as it flies through the breezes. So it happens that you can hear the sound but cannot make out what the meaning of the words is; so confused and obstructed does the voice arrive.
4.563	Praeterea verbum saepe unum perciet auris omnibus in populo missum praeconis ab ore. in multas igitur voces vox una repente diffugit, in privas quoniam se dividit auris obsignans formam verbis clarumque sonorem. at quae pars vocum non auris incidit ipsas, praeter lata perit frustra diffusa per auras. pars solidis adlisa locis reiecta sonorem reddit et inter dum frustratur imagine verbi.	Besides, a single word, sent out from a herald's mouth, often rouses the ears of everyone in a crowd. So one voice suddenly scatters into many voices, since it divides itself among individual ears, stamping its form and clear sound on the words. But the part of the voices that does not fall on ears is carried past and perishes, scattered in vain through the air. Part, dashed against solid places, is thrown back and returns a sound, and sometimes mocks us with the image of a word.
4.572	Quae bene cum videas, rationem reddere possis tute tibi atque aliis, quo pacto per loca sola saxa paris formas verborum ex ordine reddant. palantis comites cum montis inter opacos quaerimus et magna dispersos voce ciemus. sex etiam aut septem loca vidi reddere vocis, unam cum iaceres: ita colles collibus ipsi verba repulsantes iterabant dicta referri.	When you see this well, you could give an account to yourself and others of how, in lonely places, rocks give back like shapes of words in their order, when among the shadowy mountains we look for straying companions and call aloud to them, scattered as they are. I have even seen places give back six or seven voices when you uttered only one: so did the hills themselves, beating words back to hills, repeat what was said.
	/ haec loca capripedes Satyros Nymphasque tenere finitimi fingunt et Faunos esse locuntur, quorum noctivago strepitu ludoque iocanti adfirmant volgo taciturna silentia rumpi chordarumque sonos fieri dulcisque querellas, tibia quas fundit digitis pulsata canentum, et genus agricolum late sentiscere, quom Pan pinea semiferi capitis velamina quassans	/ These places, the neighbors imagine, are haunted by goat-footed Satyrs and Nymphs, and they say there are Fauns, by whose night-roaming din and playful revels, they commonly declare, the hushed silences are broken, and sounds of strings arise, and sweet laments which the pipe pours out when played by the mu-

	LATIN	ENGLISH
	unco saepe labro calamos percurrit hiantis, fistula silvestrem ne cesset fundere musam. cetera de genere hoc monstra ac portenta loquuntur, ne loca deserta ab divis quoque forte putentur sola tenere. ideo iactant miracula dictis aut aliqua ratione alia ducuntur, ut omne humanum genus est avidum nimis auricularum.	sicians' fingers, and that the farming folk hear it far and wide when Pan, shaking the pine that covers his half-beast head, often runs his curved lip over the open reeds, so that the pipe never ceases to pour out woodland music. They tell of other marvels and prodigies of this kind, so that no one may think they live in lonely places deserted even by the gods. That is why they boast of wonders in their tales, or they are led on by some other reason, since the whole human race is all too eager for listening ears.
4.595	Quod super est, non est mirandum qua ratione, per loca quae nequeunt oculi res cernere apertas, haec loca per voces veniant aurisque lacessant, conloquium clausis foribus quoque saepe videmus; ni mirum quia vox per flexa foramina rerum incolumis transire potest, simulacra renutant; perscinduntur enim, nisi recta foramina tranant, qualia sunt vitrei, species qua travolat omnis. praeterea partis in cunctas dividitur vox, ex aliis aliae quoniam gignuntur, ubi una dissuluit semel in multas exorta, quasi ignis saepe solet scintilla suos se spargere in ignis. ergo replentur loca vocibus abdita retro, omnia quae circum fervunt sonituque cientur.	For the rest, there is no reason to wonder how it is that through places where the eyes cannot see things plainly, through these places voices come and strike the ears. We often observe a conversation carried on through closed doors, too— of course, because a voice can pass unharmed through the winding passages of things, while images refuse; for they are torn apart unless they swim through straight passages, like those of glass, through which every sight flies. Besides, a voice divides itself in all directions, since voices are born one from another, once a single voice has burst out and split into many, as a spark of fire often scatters itself into fires of its own. So places hidden far back are filled with voices, all seething around and astir with sound.
	/ at simulacra viis derectis omnia tendunt, ut sunt missa semel; qua propter cernere nemo saepe supra potis est, at voces accipere extra. et tamen ipsa quoque haec, dum transit clausa [domorum] vox optunditur atque auris confusa penetrat et sonitum potius quam verba audire videmur.	/ But all images travel on straight paths once they are sent out; which is why no one can see over a fence, but can catch voices from outside. And yet even this voice, while it passes through the closed rooms of houses, is blunted and enters the ears confused, and we seem to hear sound rather than words.
4.615	Hoc, qui sentimus sucum, lingua atque palatum plusculum habent in se rationis, plus operai. principio sucum sentimus in ore, cibum cum mandendo exprimimus, ceu plenam spongiam aquai siquis forte manu premere ac siccare coëpit.	The tongue and palate, by which we perceive flavor, involve a little more reasoning, more work. First, we perceive flavor in the mouth when we press out

LATIN	ENGLISH
inde quod exprimimus per caulas omne palati diditur et rarae per flexa foramina linguae, hoc ubi levia sunt manantis corpora suci, suaviter attingunt et suaviter omnia tractant umida linguai circum sudantia templa; at contra pungunt sensum lacerantque coorta, quanto quaeque magis sunt asperitate repleta.	food by chewing, as if someone happened to begin to squeeze a sponge full of water in his hand and dry it. Then all that we press out is spread through the pores of the palate and through the winding passages of the porous tongue. When the bodies of the oozing flavor are smooth, they touch pleasantly and pleasantly handle all the moist, sweating regions around the tongue; but on the other hand they prick the sense and tear it as they rise, the more so, the more each is filled with roughness.
/ deinde voluptas est e suco fine palati; cum vero deorsum per fauces praecipitavit, nulla voluptas est, dum diditur omnis in artus; nec refert quicquam quo victu corpus alatur, dum modo quod capias concoctum didere possis artubus et stomachi tumidum servare tenorem.	/ Next, the pleasure from flavor lies within the bounds of the palate; but when it has plunged down through the throat, there is no pleasure while it is all being spread into the limbs; and it makes no difference what food the body is nourished on, so long as what you take you can digest and spread to the limbs, and keep the stomach's moisture evenly balanced.
4.633 Nunc aliis alius qui sit cibus ut videamus, expediam, quareve, aliis quod triste et amarumst, hoc tamen esse aliis possit perdulce videri, tantaque [in] his rebus distantia differitasque est, ut quod aliis cibus est aliis fuat acre venenum; est itaque ut serpens, hominis quae tacta salivis disperit ac sese mandendo conficit ipsa. praeterea nobis veratrum est acre venenum, at capris adipes et cocturnicibus auget. id quibus ut fiat rebus cognoscere possis, principio meminisse decet quae diximus ante, semina multimodis in rebus mixta teneri. porro omnes quae cumque cibum capiunt animantes, ut sunt dissimiles extrinsecus et generatim extima membrorum circumcaesura coërcet, proinde et seminibus constant variantque figura.	Now, so that we may see how different creatures have different foods, I will explain, and why what is harsh and bitter to some can nevertheless seem very sweet to others, and why the distance and difference in these things is so great that what is food to some is sharp poison to others; there is even a snake which, touched by human spittle, perishes and destroys itself by biting itself. Besides, hellebore is a sharp poison to us, but it fattens goats and quails. To understand by what means this comes about, you must first remember what we said before, that seeds are held mixed in things in many ways. Moreover, all living creatures that take food, just as they are unlike outwardly and, kind by kind, the outer contour of their limbs confines them, so too they consist of seeds that vary in shape.
/ semina cum porro distent, differre necessest intervalla viasque, foramina quae perhibemus, omnibus in membris et in ore ipsoque palato.	/ Since, further, the seeds differ, the spaces between must differ, and the passages, which we call pores,

LATIN	ENGLISH
esse minora igitur quaedam maioraque debent, esse triquetra aliis, aliis quadrata necessest, multa rutunda, modis multis multangula quaedam. namque figurarum ratio ut motusque reposcunt, proinde foraminibus debent differre figurae et variare viae proinde ac textura coërcet. hoc ubi quod suave est aliis aliis fit amarum, illi, cui suave est, levissima corpora debent contractabiliter caulas intrare palati, at contra quibus est eadem res intus acerba, aspera ni mirum penetrant hamataque fauces. nunc facile est ex his rebus cognoscere quaeque.	in all the limbs, and in the mouth and the palate itself. Some must therefore be smaller, some larger; some must be triangular, others square, many round, some many-angled in many ways. For as the arrangement of the shapes and their motions demand, so the pores must differ in their shapes and the passages vary, according as the texture confines them. So when what is sweet to some becomes bitter to others, for the one to whom it is sweet, the smoothest bodies must enter the pores of the palate caressingly; but for those to whom the same thing is sour within, rough, hooked bodies, of course, pierce the throat. Now it is easy to understand each case from these facts.
/ quippe ubi cui febris bili superante coorta est aut alia ratione aliquast vis excita morbi, perturbatur ibi iam totum corpus et omnes commutantur ibi positurae principiorum; fit prius ad sensum [ut] quae corpora conveniebant nunc non conveniant, et cetera sint magis apta, quae penetrata queunt sensum progignere acerbum; utraque enim sunt in mellis commixta sapore; id quod iam supera tibi saepe ostendimus ante.	/ For when fever has arisen in someone from an excess of bile, or the force of some disease has been stirred up in another way, then the whole body is thrown into disorder, and all the arrangements of its first beginnings are changed; it comes about that the bodies that formerly suited the sense now do not suit it, and others are more fitting, which can penetrate and produce a bitter sensation; for both kinds are mixed in the flavor of honey— as I have often shown you before, above.
4.673 Nunc age, quo pacto naris adiectus odoris tangat agam. primum res multas esse necessest unde fluens volvat varius se fluctus odorum, et fluere et mitti volgo spargique putandumst; verum aliis alius magis est animantibus aptus, dissimilis propter formas. ideoque per auras mellis apes quamvis longe ducuntur odore, volturiique cadaveribus; tum fissa ferarum ungula quo tulerit gressum promissa canum vis ducit, et humanum longe praesentit odorem Romulidarum arcis servator, candidus anser. sic aliis alius nidor datus ad sua quemque pabula ducit et a taetro resilire veneno cogit, eoque modo servantur saecla ferarum.	Now come, I will explain how the impact of smell touches the nostrils. First, there must be many things from which a varied stream of smells rolls out, and we must suppose they flow and are sent and scattered everywhere; but different smells suit different creatures better, because of their unlike shapes. And so through the air bees are drawn by the scent of honey, however far away, and vultures by corpses; then, where the cloven hoof of wild beasts has carried their steps, the power of hounds, let

	LATIN	ENGLISH
		loose, leads on, and the scent of man is sensed far off by the savior of the citadel of Romulus's sons, the white goose. So different scents, given to different creatures, lead each to its own food and force it to recoil from foul poison, and in this way the generations of beasts are preserved.[4]
4.687	Hic odor ipse igitur, naris qui cumque lacessit, est alio ut possit permitti longius alter; sed tamen haud quisquam tam longe fertur eorum quam sonitus, quam vox, mitto iam dicere quam res quae feriunt oculorum acies visumque lacessunt. errabundus enim tarde venit ac perit ante paulatim facilis distractus in aëris auras; ex alto primum quia vix emittitur ex re; nam penitus fluere atque recedere rebus odores significat quod fracta magis redolere videntur omnia, quod contrita, quod igni conlabefacta. deinde videre licet maioribus esse creatum principiis quam vox, quoniam per saxea saepta non penetrat, qua vox volgo sonitusque feruntur.	This smell, then, whatever it is that strikes the nostrils, one kind can be sent farther than another; but none of them travels as far as sound, as voice—not to mention the things that strike the eyes' sight and stir our vision. For it comes slowly, wandering, and perishes first, gradually and easily dispersed into the breezes of the air; first, because it is scarcely released from deep within the thing; for that smells flow out and depart from deep within things is shown by the fact that everything seems to smell stronger when broken, when crushed, when broken down by fire. Next, you can see that it is made of larger first beginnings than voice, since through stone walls it does not pass, where voice and sound commonly travel.
	/ quare etiam quod olet non tam facile esse videbis investigare in qua sit regione locatum; refrigescit enim cunctando plaga per auras nec calida ad sensum decurrunt nuntia rerum. errant saepe canes itaque et vestigia quaerunt.	/ Therefore you will see that it is also not so easy to track down in what region a smelly thing is located; for the blow grows cold as it lingers in the air, and the messengers of things do not run hot to the sense. That is why dogs often go astray and search for the trail.
4.706	Nec tamen hoc solis in odoribus atque saporum in generest, sed item species rerum atque colores non ita conveniunt ad sensus omnibus omnes, ut non sint aliis quaedam magis acria visu. quin etiam gallum noctem explaudentibus alis auroram clara consuetum voce vocare,	Yet this is not so only with smells and with the class of flavors; likewise the appearances and colors of things do not suit all the senses of all creatures equally, but some are harsher to the sight of some.

4 The sacred geese on the Capitol were said to have woken the Romans when the Gauls attacked by night in 390 BC.

LATIN	ENGLISH
noenu queunt rapidi contra constare leones inque tueri: ita continuo meminere fugai. ni mirum quia sunt gallorum in corpore quaedam semina, quae cum sunt oculis inmissa leonum, pupillas interfodiunt acremque dolorem praebent, ut nequeant contra durare feroces, cum tamen haec nostras acies nil laedere possint, aut quia non penetrant aut quod penetrantibus illis exitus ex oculis liber datur, in remorando laedere ne possint ex ulla lumina parte.	Indeed, the rooster, who is used to clapping night away with his wings and summoning dawn with his clear voice— ravening lions cannot stand and face him or look at him: so quickly do they think of flight. Of course, this is because there are certain seeds in the bodies of roosters which, when they are shot into the eyes of lions, pierce the pupils and cause sharp pain, so that, fierce as they are, they cannot hold out against it, though these seeds cannot hurt our sight at all, either because they do not penetrate, or because, when they do, a free exit from the eyes is given them, so that by lingering they cannot hurt the eyes in any part.

IMAGES IN THE MIND

Thin images, some combined like Centaurs, strike the mind directly in thought and in dreams.

LATIN	ENGLISH
4.722 Nunc age, quae moveant animum res accipe, et unde quae veniunt veniant in mentem percipe paucis. principio hoc dico, rerum simulacra vagari multa modis multis in cunctas undique partis tenvia, quae facile inter se iunguntur in auris, obvia cum veniunt, ut aranea bratteaque auri. quippe etenim multo magis haec sunt tenvia textu quam quae percipiunt oculos visumque lacessunt, corporis haec quoniam penetrant per rara cientque tenvem animi naturam intus sensumque lacessunt.	Now come, learn what things move the mind, and hear in a few words where the things that come into the mind come from. First, I say this: many images of things wander in many ways, in all directions everywhere, thin images, which easily join with one another in the air when they meet, like spider's web or gold leaf. For these are indeed much thinner in texture than those that take hold of the eyes and stir our sight, since they penetrate through the body's pores and stir the thin nature of the mind within and arouse its sense.
/ Centauros itaque et Scyllarum membra videmus Cerbereasque canum facies simulacraque eorum quorum morte obita tellus amplectitur ossa; omnigenus quoniam passim simulacra feruntur, partim sponte sua quae fiunt aëre in ipso, partim quae variis ab rebus cumque recedunt et quae confiunt ex horum facta figuris. nam certe ex vivo Centauri non fit imago, nulla fuit quoniam talis natura animata; verum ubi equi atque hominis casu convenit imago,	/ So we see Centaurs and the limbs of Scyllas and dog-faces like Cerberus's, and images of those whose bones the earth embraces after they have met their death; since images of every kind are carried everywhere, some that form of their own accord in the air itself, some that depart from various things, and some that are made up by combining the

LATIN	ENGLISH
haerescit facile extemplo, quod diximus ante, propter subtilem naturam et tenvia texta. cetera de genere hoc eadem ratione creantur.	shapes of these. For certainly no image of a Centaur comes from a living one, since there never was a living creature of that nature; but when images of a horse and a man happen to meet, they easily stick together at once, as I said before, because of their fine nature and thin texture. Other things of this kind are created in the same way.
/ quae cum mobiliter summa levitate feruntur, ut prius ostendi, facile uno commovet ictu quae libet una animum nobis subtilis imago; tenvis enim mens est et mire mobilis ipsa. haec fieri ut memoro, facile hinc cognoscere possis. quatinus hoc simile est illi, quod mente videmus atque oculis, simili fieri ratione necessest.	/ Since these move nimbly with the utmost lightness, as I showed before, any single fine image easily moves our mind with a single blow; for the mind itself is thin and wonderfully mobile. That this happens as I say you can easily learn from this: since what we see with the mind is like what we see with the eyes, it must come about in a similar way.
4.752 Nunc igitur docui quoniam me forte leonum cernere per simulacra, oculos quae cumque lacessunt, scire licet mentem simili ratione moveri per simulacra leonum [et] cetera quae videt aeque nec minus atque oculi, nisi quod mage tenvia cernit. nec ratione alia, cum somnus membra profudit, mens animi vigilat, nisi quod simulacra lacessunt haec eadem nostros animos quae cum vigilamus, usque adeo, certe ut videamur cernere eum quem rellicta vita iam mors et terra potitast. hoc ideo fieri cogit natura, quod omnes corporis offecti sensus per membra quiescunt nec possunt falsum veris convincere rebus.	Now, since I have shown that I see lions, let us say, by means of images, whatever ones strike the eyes, you may know that the mind is moved in a similar way by images of lions and of the other things it sees, equally and no less than the eyes, except that it perceives thinner ones. And for no other reason, when sleep has sprawled the limbs, is the mind awake, except that the same images stir our minds as when we are awake, so much so that we seem surely to see one whom, life left behind, death and earth have already taken. Nature compels this to happen because all the senses of the body are blocked and at rest throughout the limbs and cannot refute the false with the true.
/ praeterea meminisse iacet languetque sopore, nec dissentit eum mortis letique potitum iam pridem, quem mens vivom se cernere credit. quod super est, non est mirum simulacra moveri bracchiaque in numerum iactare et cetera membra; nam fit ut in somnis facere hoc videatur imago. quippe, ubi prima perit alioque est altera nata	/ Besides, memory lies idle and faint with sleep and does not object that the man is in the grip of death and doom long since, whom the mind believes it sees alive. For the rest, it is no wonder that images move and throw their arms and other limbs in rhythm;

	LATIN	ENGLISH
	inde statu, prior hic gestum mutasse videtur. scilicet id fieri celeri ratione putandumst: tanta est mobilitas et rerum copia tanta tantaque sensibili quovis est tempore in uno copia particularum, ut possit suppeditare.	for in sleep an image seems to do this. Naturally: when the first perishes and a second is born in another posture, the first seems to have changed its gesture. This, of course, we must suppose happens swiftly: so great is the mobility, and so great the supply of things, and so great, in any single perceptible moment, the supply of particles, that it can keep up the flow.
4.777	Multaque in his rebus quaeruntur multaque nobis clarandumst, plane si res exponere avemus. quaeritur in primis quare, quod cuique libido venerit, extemplo mens cogitet eius id ipsum. anne voluntatem nostram simulacra tuentur et simul ac volumus nobis occurrit imago, si mare, si terram cordist, si denique caelum? conventus hominum, pompam, convivia, pugnas, omnia sub verbone creat natura paratque? cum praesertim aliis eadem in regione locoque longe dissimilis animus res cogitet omnis. quid porro, in numerum procedere cum simulacra cernimus in somnis et mollia membra movere, mollia mobiliter cum alternis bracchia mittunt et repetunt oculis gestum pede convenienti?	Many questions are asked about these things, and much must be made clear by us, if we want to explain the matter plainly. First of all it is asked why, whatever each person has had a sudden fancy for, the mind thinks of that very thing at once. Do the images watch for our will, and does an image come to us as soon as we wish, if our heart is set on sea, on land, or on the sky? Gatherings of people, a procession, banquets, battles— does nature create and provide them all at a word? Especially when, in the same region and place, other minds are thinking of things all utterly different. And what of this: when we see images in sleep move in rhythm and sway their supple limbs, when they nimbly thrust out their supple arms in turn and repeat the gesture for our eyes with matching feet?
	/ scilicet arte madent simulacra et docta vagantur, nocturno facere ut possint in tempore ludos. an magis illud erit verum? quia tempore in uno, cum sentimus, id est cum vox emittitur una, tempora multa latent, ratio quae comperit esse, propterea fit uti quovis in tempore quaeque praesto sint simulacra locis in quisque parata. tanta est mobilitas et rerum copia tanta. hoc ubi prima perit alioque est altera nata inde statu, prior hic gestum mutasse videtur. et quia tenvia sunt, nisi quae contendit, acute cernere non potis est animus; proinde omnia quae sunt praeterea pereunt, nisi quae ex se[se] ipse paravit.	/ Naturally the images are steeped in art and wander about well trained, so that they can put on shows in the nighttime! Or will this rather be the truth? Because in one moment that we perceive, that is, while a single sound is uttered, many moments lie hidden, which reason finds to exist, it comes about that at any moment any images are ready at hand, in every place. So great is the mobility, and so great the supply of things. When the first perishes and a second is born in another posture, the first seems to have changed its gesture.

	LATIN	ENGLISH
		And because they are thin, the mind cannot see sharply any but those it strains toward; and so all that exist besides are lost, except those it has readied itself for.
	/ ipse parat sese porro speratque futurum ut videat quod consequitur rem quamque: fit ergo. nonne vides oculos etiam, cum tenvia quae sunt [praeterea pereunt, nisi quae ex se ipse paravit] cernere coeperunt, contendere se atque parare, nec sine eo fieri posse ut cernamus acute? et tamen in rebus quoque apertis noscere possis, si non advertas animum, proinde esse quasi omni tempore semotum fuerit longeque remotum. cur igitur mirumst, animus si cetera perdit praeter quam quibus est in rebus deditus ipse? deinde adopinamur de signis maxima parvis ac nos in fraudem induimus frustraminis ipsi.	/ It readies itself, moreover, and hopes that it will come to pass that it sees what follows on each thing: so it happens. Do you not see that the eyes, too, when things that are thin [besides are lost, except those it has readied itself for] they begin to look at, strain themselves and get ready, and that without this we cannot see sharply? And yet even with things in plain view you can recognize that, if you do not turn your mind to them, it is just as if they had been at all times set apart and far away. So why is it surprising if the mind loses everything else except the things to which it is itself devoted? Then too, we form huge opinions from small signs and lead ourselves into the trap of self-deception.
4.818	Fit quoque ut inter dum non suppeditetur imago eiusdem generis, sed femina quae fuit ante, in manibus vir uti factus videatur adesse, aut alia ex alia facies aetasque sequatur. quod ne miremur sopor atque oblivia curant.	It also happens at times that the image supplied is not of the same kind, but what was a woman before seems to be there in our arms, turned into a man, or one face and age follows after another. Sleep and forgetfulness see to it that we do not wonder at this.

ORGANS WERE NOT MADE FOR A PURPOSE

Eyes, tongue and limbs existed before their uses; use came from them, not they from use.

	LATIN	ENGLISH
4.823	Illud in his rebus vitium vehementer inesse effugere errorem vitareque praemetuenter, lumina ne facias oculorum clara creata, prospicere ut possimus, et ut proferre queamus proceros passus, ideo fastigia posse surarum ac feminum pedibus fundata plicari, bracchia tum porro validis ex apta lacertis esse manusque datas utraque [ex] parte ministras, ut facere ad vitam possemus quae foret usus.	In these matters there is one fault that you should strongly shun, one error to avoid with foresight: do not think that the bright lights of the eyes were created so that we could see ahead, or that, so that we could take long strides, the tapering ends of shins and thighs, set on the feet, are able to bend for that

	LATIN	ENGLISH
	cetera de genere hoc inter quae cumque pretantur, omnia perversa praepostera sunt ratione, nil ideo quoniam natumst in corpore ut uti possemus, sed quod natumst id procreat usum.	purpose, or again that the forearms, fitted to strong upper arms, and the hands, servants on either side, were given us so that we could do what was needed for life. All the other explanations of this kind that people give are backward and preposterous in their reasoning, since nothing has been born in the body so that we might use it, but what has been born creates the use.
	/ nec fuit ante videre oculorum lumina nata, nec dictis orare prius quam lingua creatast, sed potius longe linguae praecessit origo sermonem multoque creatae sunt prius aures quam sonus est auditus, et omnia denique membra ante fuere, ut opinor, eorum quam foret usus; haud igitur potuere utendi crescere causa. at contra conferre manu certamina pugnae et lacerare artus foedareque membra cruore ante fuit multo quam lucida tela volarent, et volnus vitare prius natura coëgit quam daret obiectum parmai laeva per artem. scilicet et fessum corpus mandare quieti multo antiquius est quam lecti mollia strata, et sedare sitim prius est quam pocula natum.	/ There was no seeing before the lights of the eyes were born, no pleading in words before the tongue was created; rather, the tongue's origin came long before speech, and the ears were created long before any sound was heard, and in short all the limbs existed, I think, before there was any use for them; so they cannot have grown for the sake of use. But on the other hand, fighting it out hand to hand in battle, tearing limbs and fouling bodies with blood existed long before gleaming spears flew, and nature compelled men to avoid wounds before art set a shield on the left arm to block them. Of course, to entrust the tired body to rest is far older than the soft coverings of a bed, and quenching thirst came before cups were born.
	/ haec igitur possunt utendi cognita causa credier, ex usu quae sunt vitaque reperta. illa quidem seorsum sunt omnia, quae prius ipsa nata dedere suae post notitiam utilitatis. quo genere in primis sensus et membra videmus; quare etiam atque etiam procul est ut credere possis utilitatis ob officium potuisse creari.	/ These things, then, can be believed to have been devised for the sake of use, since they were discovered from use and life. Quite separate are all those things which were first born themselves and afterward gave the idea of their usefulness. In this class we see above all the senses and the limbs; so again and again, it is far from possible for you to believe that they could have been created for the purpose of usefulness.
4.858	Illud item non est mirandum, corporis ipsa quod natura cibum quaerit cuiusque animantis. quippe etenim fluere atque recedere corpora rebus	Nor is it any wonder, likewise, that the very nature of every living creature's body seeks food. For I have shown that many bodies flow and de-

LATIN	ENGLISH
multa modis multis docui, sed plurima debent ex animalibus; [quae] quia sunt exercita motu, multa per os exhalantur, cum languida anhelant, multaque per sudorem ex alto pressa feruntur. his igitur rebus rarescit corpus et omnis subruitur natura, dolor quam consequitur rem. propterea capitur cibus, ut suffulciat artus et recreet vires inter datus, atque patentem per membra ac venas ut amorem opturet edendi.	part from things in many ways, but the most must depart from living creatures; these, because they are exercised by motion, many are breathed out through the mouth when they pant with weariness, and many are forced up from deep within and carried off through sweat. Through these things, then, the body grows porous and its whole nature is undermined, and pain follows on this. That is why food is taken: to prop up the limbs and restore strength when given within, and to stop up the gaping desire for eating throughout the limbs and veins.
/ umor item discedit in omnia quae loca cumque poscunt umorem; glomerataque multa vaporis corpora, quae stomacho praebent incendia nostro, dissupat adveniens liquor ac restinguit ut ignem, urere ne possit calor amplius aridus artus. sic igitur tibi anhela sitis de corpore nostro abluitur, sic expletur ieiuna cupido.	/ Liquid likewise departs into all the places that call for liquid; and the many massed bodies of heat that kindle fires in our stomach the arriving liquid scatters and puts out like a fire, so that the dry heat can no longer burn the limbs. So, then, panting thirst is washed out of our body; so hungry desire is filled.
4.877 Nunc qui fiat uti passus proferre queamus, cum volumus, quareque datum sit membra movere et quae res tantum hoc oneris protrudere nostri corporis insuerit, dicam: tu percipe dicta. dico animo nostro primum simulacra meandi accidere atque animum pulsare, ut diximus ante. inde voluntas fit; neque enim facere incipit ullam rem quisquam, [quam] mens providit quid velit ante. id quod providet, illius rei constat imago, ergo animus cum sese ita commovet ut velit ire inque gredi, ferit extemplo quae in corpore toto per membra atque artus animai dissita vis est; et facilest factu, quoniam coniuncta tenetur. inde ea proporro corpus ferit, atque ita tota paulatim moles protruditur atque movetur.	Now how it happens that we can step forward when we wish, and why we are able to move our limbs, and what has been accustomed to push forward this great weight of our body, I will tell: take in my words. I say that first, images of walking strike our mind and beat upon it, as I said before. Then comes the will; for no one begins to do any thing until the mind has first foreseen what it wishes. And what it foresees consists of an image of that thing. So when the mind stirs itself so that it wishes to go and step forward, at once it strikes the force of the spirit that is scattered through the whole body, through limbs and frame; and that is easy to do, since the two are held joined together. Then the spirit in turn strikes the body, and so the whole mass is gradually pushed forward and moved.

	LATIN	ENGLISH
	/ praeterea tum rarescit quoque corpus et aër, scilicet ut debet qui semper mobilis extat, per patefacta venit penetratque foramina largus, et dispargitur ad partis ita quasque minutas corporis. hic igitur rebus fit utrimque duabus, corpus ut ac navis velis ventoque feratur. nec tamen illud in his rebus mirabile constat, tantula quod tantum corpus corpuscula possunt contorquere et onus totum convertere nostrum; quippe etenim ventus subtili corpore tenvis trudit agens magnam magno molimine navem et manus una regit quanto vis impete euntem atque gubernaclum contorquet quo libet unum, multaque per trocleas et tympana pondere magno commovet atque levi sustollit machina nisu.	/ Besides, the body then also grows porous, and air — as it must, being always mobile— comes in abundance through the opened pores and penetrates, and so is spread to all the tiny parts of the body. Here, then, by two things working from both sides, the body is carried like a ship by sails and wind. Nor is it any wonder in these matters that such tiny particles can turn so large a body and wheel round our whole weight; for indeed the wind, thin with its fine body, drives a great ship with great force, and one hand steers it however fast it goes, and a single rudder turns it wherever it pleases, and a machine, by pulleys and drums, moves many things of great weight and lifts them with slight effort.

SLEEP AND DREAMS

Sleep comes when the spirit is scattered, and dreams replay the pursuits of waking life.

	LATIN	ENGLISH
4.907	Nunc quibus ille modis somnus per membra quietem inriget atque animi curas e pectore solvat, suavidicis potius quom multis versibus edam, parvus ut est cycni melior canor, ille gruum quam clamor in aetheriis dispersus nubibus austri. tu mihi da tenuis auris animumque sagacem, ne fieri negites quae dicam posse retroque vera repulsanti discedas pectore dicta, tutemet in culpa cum sis neque cernere possis.	Now by what means sleep floods the limbs with rest and frees the heart from the cares of the mind, I shall tell in verses sweet rather than many, as the swan's brief song is better than the cry of cranes scattered among the lofty clouds of the south wind. Give me fine ears and a shrewd mind, so that you do not deny that what I say can happen and go away with a heart that thrusts back true words, when you are yourself at fault and cannot see it.
4.916	Principio somnus fit ubi est distracta per artus vis animae partimque foras eiecta recessit et partim contrusa magis concessit in altum; dissoluuntur enim tum demum membra fluuntque. nam dubium non est, animai quin opera sit sensus hic in nobis, quem cum sopor inpedit esse, tum nobis animam perturbatam esse putandumst eiectamque foras, non omnem; namque iaceret aeterno corpus perfusum frigore leti. quippe ubi nulla latens animai pars remaneret in membris, cinere ut multa latet obrutus ignis,	First, sleep comes when the force of the spirit is scattered through the limbs, and part of it has been driven out and gone away, and part, crowded together, has withdrawn deeper inside; for then at last the limbs are loosened and grow slack. For there is no doubt that it is through the spirit's work

	LATIN	ENGLISH
	unde reconflari sensus per membra repente possit, ut ex igni caeco consurgere flamma?	that this sense exists in us; and when slumber prevents it from existing, then we must suppose that our spirit is thrown into disorder and driven out—not all of it; for then the body would lie steeped in the everlasting chill of death. For if no part of the spirit remained hidden in the limbs, as fire lies buried beneath much ash, from what could sense be suddenly rekindled through the limbs, as flame springs up from hidden fire?
4.929	Sed quibus haec rebus novitas confiat et unde perturbari anima et corpus languescere possit, expediam: tu fac ne ventis verba profundam.	But by what means this new state comes about, and how the spirit can be thrown into disorder and the body grow slack, I will explain: see that I do not pour out my words to the winds.
4.932	Principio externa corpus de parte necessum est, aëriis quoniam vicinum tangitur auris, tundier atque eius crebro pulsarier ictu, proptereaque fere res omnes aut corio sunt aut etiam conchis aut callo aut cortice tectae. interiorem etiam partem spirantibus aër verberat hic idem, cum ducitur atque reflatur. quare utrimque secus cum corpus vapulet et cum perveniant plagae per parva foramina nobis corporis ad primas partis elementaque prima, fit quasi paulatim nobis per membra ruina. conturbantur enim positurae principiorum corporis atque animi.	First, the body must on its outer side, since it is touched by the neighboring breezes of the air, be pounded and beaten by their frequent blows, and that is why nearly all things are covered with hide, or else with shells, or with callus, or with bark. And in those that breathe, this same air also lashes the inner part as it is drawn in and breathed out. So since the body is beaten on both sides, and since the blows make their way through the tiny pores to the primary parts and first elements of our body, there comes about, as it were, a gradual collapse throughout our limbs. For the arrangements of the first beginnings of body and mind are thrown into disorder.
	fit uti pars inde animai eliciatur et introrsum pars abdita cedat, pars etiam distracta per artus non queat esse coniuncta inter se neque motu mutua fungi; inter enim saepit coetus natura viasque. ergo sensus abit mutatis motibus alte. et quoniam non est quasi quod suffulciat artus, debile fit corpus languescuntque omnia membra, bracchia palpebraeque cadunt poplitesque cubanti saepe tamen summittuntur virisque resolvunt.	The result is that part of the spirit is drawn out, and part, hidden away, withdraws inward, and part too, scattered through the limbs, cannot stay joined together or interact in motion; for nature blocks off its meetings and passages. So sense departs deep within, as the motions change. And since there is nothing, as it were, to prop up

	LATIN	ENGLISH
		the limbs, the body grows weak and all the limbs go slack, the arms and eyelids droop, and the knees, as one lies down, often buckle even so and let their strength dissolve.
4.954	Deinde cibum sequitur somnus, quia, quae facit aër, haec eadem cibus, in venas dum diditur omnis, efficit. et multo sopor ille gravissimus exstat, quem satur aut lassus capias, quia plurima tum se corpora conturbant magno contusa labore. fit ratione eadem coniectus parte animai altior atque foras eiectus largior eius, et divisior inter se ac distractior intus.	Then too, sleep follows food, because the same effects the air produces, food, while it is being spread through all the veins, produces too. And that slumber is by far the heaviest which you fall into when full or tired, because then the greatest number of bodies are thrown into disorder, bruised by much labor. By the same reasoning, the spirit is in part packed deeper, and more of it is driven out, and it is more divided and scattered within.
4.962	Et quo quisque fere studio devinctus adhaeret aut quibus in rebus multum sumus ante morati atque in ea ratione fuit contenta magis mens, in somnis eadem plerumque videmur obire: causidici causas agere et componere leges, induperatores pugnare ac proelia obire, nautae contractum cum ventis degere bellum, nos agere hoc autem et naturam quaerere rerum semper et inventam patriis exponere chartis. cetera sic studia atque artes plerumque videntur in somnis animos hominum frustrata tenere.	And whatever pursuit each of us is bound to and clings to, or whatever things we have spent much time on before, so that the mind has been more strained in that task, in sleep we generally seem to go about those same things: lawyers plead cases and draft laws, generals fight and go into battle, sailors wage their grappling war with the winds, and I pursue this task: to seek out the nature of things always, and set it forth, once found, in my country's language. So other pursuits and arts are generally seen to hold men's minds in sleep with their illusions.
	/ et qui cumque dies multos ex ordine ludis adsiduas dederunt operas, plerumque videmus, cum iam destiterunt ea sensibus usurpare, relicuas tamen esse vias in mente patentis, qua possint eadem rerum simulacra venire; per multos itaque illa dies eadem obversantur ante oculos, etiam vigilantes ut videantur cernere saltantis et mollia membra moventis et citharae liquidum carmen chordasque loquentis auribus accipere et consessum cernere eundem scenaique simul varios splendere decores. usque adeo magni refert studium atque voluntas,	/ And those who for many days in a row have given unbroken attention to the games, we generally see, when they have stopped taking them in with their senses, still have passages left open in their minds by which the same images of things can come; so for many days those same things hover before their eyes, so that even awake they seem to see dancers moving their supple limbs, and to take in with their ears the liquid song of the lyre and its speaking strings, and to see the same audi-

LATIN	ENGLISH
et quibus in rebus consuerint esse operati non homines solum sed vero animalia cuncta.	ence and the varied splendors of the stage all shining at once. So much do zeal and will matter, and the things in which one is used to be engaged — not for humans only, but for all living creatures.
/ quippe videbis equos fortis, cum membra iacebunt, in somnis sudare tamen spirareque semper et quasi de palma summas contendere viris aut quasi carceribus patefactis [edere voces] venantumque canes in molli saepe quiete iactant crura tamen subito vocisque repente mittunt et crebro redducunt naribus auras. ut vestigia si teneant inventa ferarum, expergefactique secuntur inania saepe cervorum simulacra, fugae quasi dedita cernant, donec discussis redeant erroribus ad se.	/ For you will see strong horses, when their limbs are lying at rest, still sweating in their sleep and panting constantly and straining their utmost strength as if for the prize, or as if the starting gates were thrown open, whinnying. And hunters' dogs, often in soft repose, still suddenly toss their legs and all at once give tongue and keep sniffing the air with their nostrils, as if they held the trail of beasts they had found, and even when awakened they often chase empty images of stags, as if they saw them in flight, until they shake off their delusions and come back to themselves.
/ at consueta domi catulorum blanda propago discutere et corpus de terra corripere instant, [iactant crura tamen subito vocisque repente] [mittunt et crebro redducunt naribus auras] [ut vestigia si teneant inventa ferarum] [expergefactique secuntur inania saepe] proinde quasi ignotas facies atque ora tuantur. et quo quaeque magis sunt aspera seminiorum, tam magis in somnis eadem saevire necessust. at variae fugiunt volucres pinnisque repente sollicitant divom nocturno tempore lucos, accipitres somno in leni si proelia pugnas edere sunt persectantes visaeque volantes. porro hominum mentes, magnis quae motibus edunt magna, itidem saepe in somnis faciuntque geruntque, reges expugnant, capiuntur, proelia miscent, tollunt clamorem, quasi si iugulentur ibidem.	/ But the fawning breed of puppies used to living in the house hurry to shake off sleep and snatch their bodies up from the ground, [still suddenly toss their legs and all at once] [give tongue and keep sniffing the air with their nostrils] [as if they held the trail of beasts they had found] [and even when awakened they often chase empty] as if they were seeing unfamiliar faces and features. And the rougher the seeds that make each creature, the more fiercely it must rage in its sleep. But birds of various kinds flee and suddenly with their wings disturb the groves of the gods at night, if in gentle sleep they have seemed to see hawks giving fight and battle, pursuing them and flying at them. Moreover, men's minds, which with great motions bring forth great deeds, often do and carry out the same in sleep: they conquer kings, are captured, join battle,

LATIN	ENGLISH
	raise a shout as if they were having their throats cut on the spot.
/ multi depugnant gemitusque doloribus edunt et quasi pantherae morsu saevive leonis mandantur, magnis clamoribus omnia complent. multi de magnis per somnum rebus loquuntur indicioque sui facti persaepe fuere. multi mortem obeunt. multi, de montibus altis ut quasi praecipitent ad terram corpore toto, exterruntur et ex somno quasi mentibus capti vix ad se redeunt permoti corporis aestu. flumen item sitiens aut fontem propter amoenum adsidet et totum prope faucibus occupat amnem. puri saepe lacum propter si ac dolia curta somno devincti credunt se extollere vestem, totius umorem saccatum corporis fundunt, cum Babylonica magnifico splendore rigantur.	/ Many fight to the finish and let out groans of pain, and, as if mauled by the bite of a panther or a savage lion, are devoured, and fill the whole place with loud cries. Many talk in their sleep about great affairs and have very often given evidence of their own deeds. Many meet death. Many, as if they were falling from high mountains to the ground with their whole body, are terrified, and as if out of their minds from sleep, scarcely come to themselves, shaken by the body's turmoil. Likewise a thirsty man sits down beside a river or a lovely spring and almost swallows the whole stream in his throat. Often little children, if beside a pool or a cut-down jar they believe, deep in sleep, that they are lifting their clothes, pour out the filtered liquid of their whole body, and the Babylonian coverlets of splendid magnificence are soaked.
/ tum quibus aetatis freta primitus insinuatur semen, ubi ipsa dies membris matura creavit, conveniunt simulacra foris e corpore quoque, nuntia praeclari voltus pulchrique coloris, qui ciet inritans loca turgida semine multo, ut quasi transactis saepe omnibus rebus profundant fluminis ingentis fluctus vestemque cruentent.	/ Then those into whom, in the stormy straits of youth, seed is first making its way, when the day itself has made it ripe in their limbs, are met by images from outside, from some body or other, messengers of a lovely face and fine complexion, which stirs and excites the places swollen with much seed, so that, as if the whole act were done, they often pour out great floods of a stream and stain their clothes.

LOVE AND DESIRE

Desire is aroused by images of a body; love is a wound and a madness best avoided.

LATIN	ENGLISH
4.1037 Sollicitatur id [in] nobis, quod diximus ante, semen, adulta aetas cum primum roborat artus. namque alias aliud res commovet atque lacessit;	That seed in us is stirred, as I said before, when ripening age first strengthens the limbs. For different things move and stir different things;

LATIN	ENGLISH
ex homine humanum semen ciet una hominis vis. quod simul atque suis eiectum sedibus exit, per membra atque artus decedit corpore toto, in loca conveniens nervorum certa cietque continuo partis genitalis corporis ipsas. inritata tument loca semine fitque voluntas eicere id quo se contendit dira lubido, [incitat inritans loca turgida semine multo] idque petit corpus, mens unde est saucia amore; namque omnes plerumque cadunt in vulnus et illam emicat in partem sanguis, unde icimur ictu, et si comminus est, hostem ruber occupat umor.	only the influence of a human being calls forth human seed from a human. As soon as it has been driven out of its seats and goes forth, it withdraws from the whole body through limbs and frame, gathering in certain regions of the sinews, and at once rouses the very genital parts of the body. Those parts, stimulated, swell with seed, and there arises the will to discharge it toward that which fierce desire strains toward, [it rouses, exciting the places swollen with much seed] and it seeks the body from which the mind is wounded by love; for all, as a rule, fall toward their wound, and the blood spurts out in the direction from which we are struck by the blow, and if the enemy is close at hand, the red stream covers him.
/ sic igitur Veneris qui telis accipit ictus, sive puer membris muliebribus hunc iaculatur seu mulier toto iactans e corpore amorem, unde feritur, eo tendit gestitque coire et iacere umorem in corpus de corpore ductum; namque voluptatem praesagit muta cupido.	/ So, then, whoever receives a wound from the weapons of Venus— whether it is a boy with womanly limbs who shoots at him or a woman darting love from her whole body— he strains toward the source of his wound and longs to unite and cast the fluid drawn from his body into that body; for mute desire foretells the pleasure.
4.1058 Haec Venus est nobis; hinc autemst nomen Amoris, hinc illaec primum Veneris dulcedinis in cor stillavit gutta et successit frigida cura; nam si abest quod ames, praesto simulacra tamen sunt illius et nomen dulce obversatur ad auris. sed fugitare decet simulacra et pabula amoris absterrere sibi atque alio convertere mentem et iacere umorem coniectum in corpora quaeque nec retinere semel conversum unius amore et servare sibi curam certumque dolorem; ulcus enim vivescit et inveterascit alendo inque dies gliscit furor atque aerumna gravescit, si non prima novis conturbes volnera plagis volgivagaque vagus Venere ante recentia cures aut alio possis animi traducere motus.	This is Venus for us; this is where the name of Love comes from; this is where that drop of Venus's sweetness first trickled into the heart, and chilling care followed. For if what you love is absent, still its images are at hand, and its sweet name hovers about your ears. But it is right to flee those images and frighten away what feeds love, and to turn the mind elsewhere, and to cast the gathered fluid into any bodies, and not to hold it back, once turned by love of one alone, and so store up care and certain pain for oneself; for the sore quickens and becomes chronic by feeding,

LATIN	ENGLISH
	and day by day the frenzy grows and the misery gets heavier, unless you disrupt the first wounds with new blows and heal them while still fresh, roaming with roaming Venus, or can divert the motions of the mind elsewhere.
4.1073 Nec Veneris fructu caret is qui vitat amorem, sed potius quae sunt sine poena commoda sumit; nam certe purast sanis magis inde voluptas quam miseris; etenim potiundi tempore in ipso fluctuat incertis erroribus ardor amantum nec constat quid primum oculis manibusque fruantur. quod petiere, premunt arte faciuntque dolorem corporis et dentes inlidunt saepe labellis osculaque adfigunt, quia non est pura voluptas et stimuli subsunt, qui instigant laedere id ipsum, quod cumque est, rabies unde illaec germina surgunt. sed leviter poenas frangit Venus inter amorem blandaque refrenat morsus admixta voluptas. namque in eo spes est, unde est ardoris origo, restingui quoque posse ab eodem corpore flammam.	Nor does the man who avoids love go without the fruits of Venus; rather, he takes the benefits that come without the penalty; for surely the pleasure from it is purer for the healthy-minded than for the lovesick; for at the very moment of possession the lovers' passion wavers, drifting uncertainly, and they cannot settle what to enjoy first with eyes and hands. What they have sought they squeeze tight and hurt the body, and often dash their teeth against the lips and fasten their kisses hard, because the pleasure is not pure and there are goads beneath that spur them to hurt the very thing, whatever it is, from which those seeds of madness spring. But Venus lightly breaks the penalties in the midst of love, and the coaxing pleasure mixed in reins in the bites. For in this lies the hope that from the same body that is the source of their burning, the flame can also be quenched.
/ quod fieri contra totum natura repugnat; unaque res haec est, cuius quam plurima habemus, tam magis ardescit dira cuppedine pectus. nam cibus atque umor membris adsumitur intus; quae quoniam certas possunt obsidere partis, hoc facile expletur laticum frugumque cupido. ex hominis vero facie pulchroque colore nil datur in corpus praeter simulacra fruendum tenvia; quae vento spes raptast saepe misella.	/ But nature resists this happening, entirely to the contrary; this is the one thing where, the more of it we have, the more the heart burns with fierce desire. For food and drink are taken into the limbs within; and since these can occupy fixed places, the desire for drink and grain is easily satisfied. But from a person's face and lovely complexion nothing is given to the body to enjoy except images, thin ones—and that wretched hope is often snatched away by the wind.

LATIN	ENGLISH
/ ut bibere in somnis sitiens quom quaerit et umor non datur, ardorem qui membris stinguere possit, sed laticum simulacra petit frustraque laborat in medioque sitit torrenti flumine potans, sic in amore Venus simulacris ludit amantis, nec satiare queunt spectando corpora coram nec manibus quicquam teneris abradere membris possunt errantes incerti corpore toto. denique cum membris conlatis flore fruuntur aetatis, iam cum praesagit gaudia corpus atque in eost Venus ut muliebria conserat arva, adfigunt avide corpus iunguntque salivas oris et inspirant pressantes dentibus ora, ne quiquam, quoniam nihil inde abradere possunt nec penetrare et abire in corpus corpore toto; nam facere inter dum velle et certare videntur.	/ As when in dreams a thirsty man seeks to drink, and no liquid is given that could quench the burning in his limbs, but he seeks the images of water and labors in vain, and thirsts even while drinking in the midst of a rushing river, so in love Venus mocks lovers with images, and they cannot sate themselves by gazing at bodies face to face, nor can they rub anything off from the tender limbs with their hands as they wander uncertainly all over the body. Then, when with limbs entwined they enjoy the flower of youth, when the body already foretells its joys and Venus is at the point of sowing the woman's fields, they clasp each other greedily, and mingle the saliva of their mouths, and breathe in, pressing teeth on lips— in vain, since they can rub nothing off from there, nor penetrate and pass into the other body with their whole body; for at times they seem to want to do this, and to strive for it.
/ usque adeo cupide in Veneris compagibus haerent, membra voluptatis dum vi labefacta liquescunt. tandem ubi se erupit nervis coniecta cupido, parva fit ardoris violenti pausa parumper. inde redit rabies eadem et furor ille revisit, cum sibi quod cupiant ipsi contingere quaerunt, nec reperire malum id possunt quae machina vincat. usque adeo incerti tabescunt volnere caeco.	/ So eagerly do they cling in the couplings of Venus, while their limbs melt, loosened by the force of pleasure. At last, when the desire gathered in the sinews has burst out, there comes a small pause in the violent burning for a little while. Then the same madness returns and that frenzy comes back, when they seek to attain what they themselves desire, and cannot find a device to conquer that malady. So uncertainly do they waste away from a hidden wound.

THE COSTS OF LOVE

Lovers waste wealth and reputation, and bitterness wells up amid their pleasures.

LATIN	ENGLISH
4.1121	

	LATIN	ENGLISH
	Adde quod absumunt viris pereuntque labore, adde quod alterius sub nutu degitur aetas, languent officia atque aegrotat fama vacillans. labitur interea res et Babylonia fiunt unguenta et pulchra in pedibus Sicyonia rident, scilicet et grandes viridi cum luce zmaragdi auro includuntur teriturque thalassina vestis adsidue et Veneris sudorem exercita potat. et bene parta patrum fiunt anademata, mitrae, inter dum in pallam atque Alidensia Ciaque vertunt.	Add that they use up their strength and are ruined by the toil; add that life is lived at another's beck and call. Duties are neglected, and reputation totters and sickens. Meanwhile wealth slips away and turns into Babylonian perfumes, and lovely Sicyonian shoes smile on her feet, and of course huge emeralds with green light are set in gold, and the sea-colored gown is worn out constantly and, hard used, drinks in the sweat of Venus. And the fathers' well-earned wealth becomes headbands and turbans, and at times is turned into a robe, or gowns from Alinda and Ceos.[5]
	/ eximia veste et victu convivia, ludi, pocula crebra, unguenta, coronae, serta parantur, ne quiquam, quoniam medio de fonte leporum surgit amari aliquid, quod in ipsis floribus angat, aut cum conscius ipse animus se forte remordet desidiose agere aetatem lustrisque perire, aut quod in ambiguo verbum iaculata reliquit, quod cupido adfixum cordi vivescit ut ignis, aut nimium iactare oculos aliumve tueri quod putat in voltuque videt vestigia risus.	/ Banquets with exquisite coverings and fare, games, cup after cup, perfumes, crowns, garlands are laid on— in vain, since from the very fountain of delights some bitterness wells up to torment them amid the flowers themselves, either when the guilty mind perhaps bites itself for spending life in idleness and perishing in debauchery, or because she has let fly an ambiguous word and left it, which, fixed in the passionate heart, comes alive like fire, or because he thinks she is casting her eyes about too much, or looking at another, and sees in her face traces of a smile.
4.1141	Atque in amore mala haec proprio summeque secundo inveniuntur; in adverso vero atque inopi sunt, prendere quae possis oculorum lumine operto. innumerabilia; ut melius vigilare sit ante, qua docui ratione, cavereque, ne inliciaris. nam vitare, plagas in amoris ne iaciamur, non ita difficile est quam captum retibus ipsis exire et validos Veneris perrumpere nodos. et tamen implicitus quoque possis inque peditus effugere infestum, nisi tute tibi obvius obstes et praetermittas animi vitia omnia primum	These evils are found in love that is secure and at its most prosperous; but in love that is thwarted and hopeless there are evils you could grasp with your eyes shut— countless ones; so it is better to be on guard beforehand, in the way I have taught, and take care not to be lured in. For to avoid being thrown into the nets of love is not as difficult as, once caught, to get out

5 Babylonian perfumes, shoes from Sicyon near Corinth, and fabrics from Alinda in Caria and the island of Ceos were famous luxuries.

LATIN	ENGLISH
aut quae corporis sunt eius, quam praepetis ac vis. nam faciunt homines plerumque cupidine caeci et tribuunt ea quae non sunt his commoda vere. multimodis igitur pravas turpisque videmus esse in deliciis summoque in honore vigere.	of the very meshes and break the strong knots of Venus. And yet even entangled and hampered, you could escape the danger, unless you stand in your own way and overlook, first, all the faults of mind or of body in her whom you seek and want. For men mostly do this, blinded by desire, and grant them merits they do not truly have. So we see women faulty and ill-favored in many ways being treated as darlings and flourishing in the highest esteem.
/ atque alios alii inrident Veneremque suadent ut placent, quoniam foedo adflictentur amore, nec sua respiciunt miseri mala maxima saepe. nigra melichrus est, inmunda et fetida acosmos, caesia Palladium, nervosa et lignea dorcas, parvula, pumilio, chariton mia, tota merum sal, magna atque inmanis cataplexis plenaque honoris. balba loqui non quit, traulizi, muta pudens est; at flagrans, odiosa, loquacula Lampadium fit. ischnon eromenion tum fit, cum vivere non quit prae macie; rhadine verost iam mortua tussi. at nimia et mammosa Ceres est ipsa ab Iaccho, simula Silena ac Saturast, labeosa philema. cetera de genere hoc longum est si dicere coner.	/ And some laugh at others and urge them to appease Venus, since they are afflicted by a shameful love, and the poor wretches often fail to see their own far greater woes. A dark girl is melichrus (“honey-toned”); an unwashed, smelly one acosmos (“unadorned”); a gray-eyed girl a Palladium (“little Athena”); a wiry, wooden one a dorcas (“gazelle”); a tiny, petite one is chariton mia (“one of the Graces”), pure wit through and through; a big, towering one is cataplexis (“a marvel”), full of dignity. The stammerer who cannot talk is said to traulizi (“lisp sweetly”); the mute one is modest; but the fiery, tiresome chatterbox becomes a Lampadium (“little torch”). She becomes ischnon eromenion (“a slender darling”) when she can scarcely live for thinness; and she is rhadine (“delicate”) when she is half-dead with coughing. But the ample, full-breasted one is Ceres herself, nursing Iacchus; the snub-nosed one is a Silena or a Satyress; the full-lipped one a philema (“kiss”). It would be tedious if I tried to tell the rest of this kind.[6]
/ sed tamen esto iam quantovis oris honore, cui Veneris membris vis omnibus exoriatur; nempe aliae quoque sunt; nempe hac sine viximus ante; nempe eadem facit et scimus facere omnia turpi et miseram taetris se suffit odoribus ipsa, quam famulae longe fugitant furtimque cachinnant.	/ But suppose she has all the beauty of face you could wish, and from all her limbs the power of Venus rises; surely there are others too; surely we lived without her before; surely she does, and we know she does, all the

6 Lucretius mocks lovers’ Greek pet names, kept here in Greek with English renderings. Iacchus is the infant Bacchus, nursed by Ceres, goddess of grain; Silenus and the Satyrs were snub-nosed companions of Bacchus.

	LATIN	ENGLISH
	at lacrimans exclusus amator limina saepe floribus et sertis operit postisque superbos unguit amaracino et foribus miser oscula figit; quem si iam ammissum venientem offenderit aura una modo, causas abeundi quaerat honestas et meditata diu cadat alte sumpta querella stultitiaque ibi se damnet, tribuisse quod illi plus videat quam mortali concedere par est.	same things as a plain woman, and, poor thing, fumigates herself with foul smells, while her maids keep well away from her and giggle behind her back. But the lover, shut out and weeping, often covers the threshold with flowers and garlands, and anoints the proud doorposts with marjoram oil, and, poor wretch, plants kisses on the door; yet if he were let in, and a single whiff met him as he came, he would look for decent excuses to leave, and the long-rehearsed lament, fetched from deep, would fall flat, and he would condemn himself for folly there, seeing that he had granted her more than is right to grant to a mortal.
	/ nec Veneres nostras hoc fallit; quo magis ipsae omnia summo opere hos vitae poscaenia celant, quos retinere volunt adstrictosque esse in amore, ne quiquam, quoniam tu animo tamen omnia possis protrahere in lucem atque omnis inquirere risus et, si bello animost et non odiosa, vicissim praetermittere [et] humanis concedere rebus.	/ Nor are our Venuses unaware of this; all the more do they take the greatest pains to hide all this backstage side of life from those they want to hold fast and keep bound in love— in vain, since you can still in your mind drag it all into the light and find out all that is laughable, and if she has a good heart and is not spiteful, in turn overlook it and make allowance for human nature.
4.1192	Nec mulier semper ficto suspirat amore, quae conplexa viri corpus cum corpore iungit et tenet adsuctis umectans oscula labris; nam facit ex animo saepe et communia quaerens gaudia sollicitat spatium decurrere amoris. nec ratione alia volucres armenta feraeque et pecudes et equae maribus subsidere possent, si non, ipsa quod illarum subat, ardet abundans natura et Venerem salientum laeta retractat. nonne vides etiam quos mutua saepe voluptas vinxit, ut in vinclis communibus excrucientur, in triviis cum saepe canes discedere aventis divorsi cupide summis ex viribus tendunt, quom interea validis Veneris compagibus haerent? quod facerent numquam, nisi mutua gaudia nossent, quae iacere in fraudem possent vinctosque tenere.	Nor does a woman always sigh with feigned love when she embraces a man's body and joins body to body and holds him, moistening kisses with lips pressed to his; for she often does it from the heart, and seeking shared joys, she urges him to run the course of love. Nor in any other way could birds, cattle, and wild beasts, sheep, and mares submit to males, if their own nature were not in heat, burning abundantly, and did not gladly respond to the Venus of those who mount them. Do you not see, too, how those whom mutual pleasure has often bound are tormented in their shared bonds,

	LATIN	ENGLISH
		when dogs at the crossroads, longing to part, often pull eagerly in opposite directions with all their strength, while they are held fast in the strong couplings of Venus? They would never do this unless they knew mutual joys, which could lure them into the trap and hold them bound.
	/ quare etiam atque etiam, ut dico, est communis voluptas.	/ So again and again, as I say, the pleasure is shared.

HEREDITY AND FERTILITY

Children resemble either parent through the mixing of seed; fertility depends on nature, not the gods.

	LATIN	ENGLISH
4.1209	Et commiscendo quom semine forte virilem femina vim vicit subita vi corripuitque, tum similes matrum materno semine fiunt, ut patribus patrio. sed quos utriusque figurae esse vides, iuxtim miscentes vulta parentum, corpore de patrio et materno sanguine crescunt, semina cum Veneris stimulis excita per artus obvia conflixit conspirans mutuus ardor, et neque utrum superavit eorum nec superatumst. fit quoque ut inter dum similes existere avorum possint et referant proavorum saepe figuras, propterea quia multa modis primordia multis mixta suo celant in corpore saepe parentis, quae patribus patres tradunt a stirpe profecta.	And when, in the mingling of seed, the woman happens to overcome the man's force with a sudden force of her own and seize it, then children are born like their mothers from the mother's seed, as they are like their fathers from the father's. But those you see with the features of both, blending side by side the faces of their parents, grow from the father's body and the mother's blood, when the seeds, stirred through the limbs by the goads of Venus, have been dashed together by a mutual passion breathing as one, and neither of them has conquered nor been conquered. It also happens at times that children can turn out like their grandparents and often recall the features of great-grandparents, because parents often conceal in their bodies many first beginnings mixed in many ways, which fathers hand down to fathers, passed down from the stock.
	/ inde Venus varia producit sorte figuras, maiorumque refert voltus vocesque comasque; quandoquidem nihilo magis haec [de] semine certo fiunt quam facies et corpora membraque nobis. et muliebre oritur patrio de semine saeclum maternoque mares existunt corpore creti;	/ From these Venus brings forth features by varied lot, and reproduces the faces, voices, and hair of ancestors; since these things come from definite seed no less than our faces and bodies and limbs.

	LATIN	ENGLISH
	semper enim partus duplici de semine constat, atque utri similest magis id quod cumque creatur, eius habet plus parte aequa; quod cernere possis, sive virum suboles sivest muliebris origo.	And the female sex arises from the father's seed, and males come forth made from the mother's body; for a birth always consists of twofold seed, and whatever is created, whichever parent it resembles more, has more than an equal share of that one; as you can see, whether the offspring is male or its origin female.
4.1233	Nec divina satum genitalem numina cuiquam absterrent, pater a gnatis ne dulcibus umquam appelletur et ut sterili Venere exigat aevom; quod plerumque putant et multo sanguine maesti conspergunt aras adolentque altaria donis, ut gravidas reddant uxores semine largo; ne quiquam divom numen sortisque fatigant; nam steriles nimium crasso sunt semine partim, et liquido praeter iustum tenuique vicissim. tenve locis quia non potis est adfigere adhaesum, liquitur extemplo et revocatum cedit abortu. crassius hinc porro quoniam concretius aequo mittitur, aut non tam prolixo provolat ictu aut penetrare locos aeque nequit aut penetratum aegre admiscetur muliebri semine semen. nam multum harmoniae Veneris differre videntur.	Nor is it the divine powers that bar anyone from procreative sowing, so that he is never called father by sweet children and must live out his life in barren love, as people mostly believe; and in their sorrow they sprinkle the altars with much blood and make them smoke with offerings, to make their wives pregnant with abundant seed. In vain they weary the power of the gods and the oracles; for some are sterile because their seed is too thick, and others, in turn, because it is more fluid and thin than is right. The thin, since it cannot cling fast in those places, flows away at once and, drawn back, fails in miscarriage. The thicker, next, since it is discharged more clotted than it should be, either does not fly forward with so far-reaching a thrust, or cannot penetrate the places equally, or, having penetrated, mixes only with difficulty, seed with the woman's seed. For the harmonies of love seem to vary widely.
	/ atque alias alii complent magis ex aliisque succipiunt aliae pondus magis inque gravescunt. et multae steriles Hymenaeis ante fuerunt pluribus et nactae post sunt tamen unde puellos suscipere et partu possent ditescere dulci. et quibus ante domi fecundae saepe nequissent uxoris parere, inventast illis quoque compar natura, ut possent gnatis munire senectam. usque adeo magni refert, ut semina possint seminibus commisceri genitaliter apta crassaque conveniant liquidis et liquida crassis. atque in eo refert quo victu vita colatur; namque aliis rebus concrescunt semina membris	/ And some men fill some women better, and from some men other women more readily take up the burden and grow heavy with child. And many women have been barren before in several marriages, and yet afterward have found a partner from whom they could bear little children and be enriched with sweet offspring. And men whose wives at home, though fertile, had often failed to bear them children, found for themselves too a matching

LATIN	ENGLISH
atque aliis extenvantur tabentque vicissim. et quibus ipsa modis tractetur blanda voluptas.	nature, so that they could fortify their old age with children. So much does it matter that seeds be able to mix with seeds in a way fit for procreation, and that thick should meet with fluid and fluid with thick. It matters too on what diet life is maintained; for by some foods seeds grow thick in the body, and by others, in turn, they are thinned and waste away. And the ways in which the caressing pleasure itself is conducted—
/ id quoque permagni refert; nam more ferarum quadrupedumque magis ritu plerumque putantur concipere uxores, quia sic loca sumere possunt pectoribus positis sublatis semina lumbis. nec molles opus sunt motus uxoribus hilum. nam mulier prohibet se concipere atque repugnat, clunibus ipsa viri Venerem si laeta retractat atque exossato ciet omni pectore fluctus; eicit enim sulcum recta regione viaque vomeris atque locis avertit seminis ictum. idque sua causa consuerunt scorta moveri, ne complerentur crebro gravidaeque iacerent, et simul ipsa viris Venus ut concinnior esset; coniugibus quod nil nostris opus esse videtur.	/ that too matters a great deal. For in the manner of wild beasts and after the fashion of four-footed creatures, wives are generally thought to conceive more readily, since in that position the places can take in the seeds, with the chest down and the loins raised. Nor do wives have the least need of voluptuous movements. For a woman prevents herself from conceiving and fights against it if in her delight she answers the man's lovemaking with her buttocks and, her whole body gone supple, rouses its waves; for she throws the furrow off the straight line and path of the plowshare and turns the stroke of the seed away from the places. Prostitutes are in the habit of moving like this for their own reasons, so as not to be made pregnant often and lie with child, and also so that sex itself might be more pleasing to men; which our wives plainly have no need of.
4.1278 Nec divinitus inter dum Venerisque sagittis deteriore fit ut forma muliercula ametur; nam facit ipsa suis inter dum femina factis morigerisque modis et munde corpore culto, ut facile insuescat secum [te] degere vitam. quod super est, consuetudo concinnat amorem; nam leviter quamvis quod crebro tunditur ictu, vincitur in longo spatio tamen atque labascit. nonne vides etiam guttas in saxa cadentis umoris longo in spatio pertundere saxa?	Nor is it by divine will or the arrows of Venus that sometimes a woman of plainer looks is loved; for sometimes the woman herself, by her own actions, her obliging ways, and the neat care of her person, makes it easy for you to grow used to living your life with her. Besides, habit is what builds love; for whatever is struck by blows, however light, but often repeated,

LATIN	ENGLISH
	is still overcome in the long run and gives way. Do you not see that even drops of water falling on rocks in the long run bore through the rocks?

Book V

The world and civilization
Our world is mortal; the origin of life; the rise of human society.

	LATIN	ENGLISH
5.1	Quis potis est dignum pollenti pectore carmen condere pro rerum maiestate hisque repertis? quisve valet verbis tantum, qui fingere laudes pro meritis eius possit, qui talia nobis pectore parta suo quaesitaque praemia liquit? nemo, ut opinor, erit mortali corpore cretus. nam si, ut ipsa petit maiestas cognita rerum, dicendum est, deus ille fuit, deus, inclyte Memmi, qui princeps vitae rationem invenit eam quae nunc appellatur sapientia, quique per artem fluctibus et tantis vitam tantisque tenebris in tam tranquillo et tam clara luce locavit. confer enim divina aliorum antiqua reperta.	Who has a mind strong enough to compose a song worthy of the majesty of things and of these discoveries? Or who has such power with words that he could shape praises to match the merits of the man who left us such rewards, won and sought out by his own mind? No one, I think, who is made of a mortal body. For if we must speak as the majesty of things, now known, itself demands, he was a god, a god, illustrious Memmius, who first discovered that reasoned way of life which is now called wisdom, and who by his skill brought life out of such great waves and such great darkness and set it in so calm a place and so clear a light. For compare the divine discoveries of others long ago.
	/ namque Ceres fertur fruges Liberque liquoris vitigeni laticem mortalibus instituisse; cum tamen his posset sine rebus vita manere, ut fama est aliquas etiam nunc vivere gentis. at bene non poterat sine puro pectore vivi; quo magis hic merito nobis deus esse videtur, ex quo nunc etiam per magnas didita gentis dulcia permulcent animos solacia vitae. Herculis antistare autem si facta putabis, longius a vera multo ratione ferere. quid Nemeaeus enim nobis nunc magnus hiatus ille leonis obesset et horrens Arcadius sus, tanto opere officerent nobis Stymphala colentes? denique quid Cretae taurus Lernaeaque pestis hydra venenatis posset vallata colubris?	/ For Ceres, it is said, gave mortals grain, and Liber the drink of the vine-born juice; and yet life could go on without these things, as there are said to be peoples who live so even now. But no one could live well without a pure heart; so this man seems to us all the more rightly a god, from whom even now, spread through great nations, the sweet consolations of life soothe our minds. But if you think the deeds of Hercules surpass his, you will be carried much further from true reasoning. For what harm could they do us now, those great gaping jaws of the Nemean lion, and the bristling boar of Arcadia? And how could the birds that haunt Stymphalus hurt us so? Or, lastly, the bull of Crete, and the plague of

LATIN	ENGLISH
	Lerna, the hydra, fenced about with venomous snakes?[1]
/ quidve tripectora tergemini vis Geryonai et Diomedis equi spirantes naribus ignem Thracia Bistoniasque plagas atque Ismara propter aureaque Hesperidum servans fulgentia mala, asper, acerba tuens, immani corpore serpens arboris amplexus stirpes? quid denique obesset propter Atlanteum litus pelagique severa, quo neque noster adit quisquam nec barbarus audet? cetera de genere hoc quae sunt portenta perempta, si non victa forent, quid tandem viva nocerent? nil, ut opinor: ita ad satiatem terra ferarum nunc etiam scatit et trepido terrore repleta est per nemora ac montes magnos silvasque profundas; quae loca vitandi plerumque est nostra potestas. at nisi purgatumst pectus, quae proelia nobis atque pericula tumst ingratis insinuandum!	/ Or the three-breasted might of triple Geryon, and the horses of Diomedes breathing fire from their nostrils near Thrace and the Bistonian lands and Ismarus, and, guarding the gleaming golden apples of the Hesperides, the fierce, grim-eyed serpent of monstrous body, coiled round the tree's trunk? What harm, in the end, could it do out by the Atlantic shore and the stern wastes of the sea, where no one of ours goes and no barbarian dares? And all the other monsters of this kind that were slain— had they not been conquered, what harm could they do alive? None, I think: the earth teems with wild beasts to surfeit even now, and is filled with trembling terror throughout the groves and great mountains and deep forests; but those places, for the most part, we have the power to avoid. Yet unless the heart is cleansed, what battles and dangers must then work their way into us against our will!
/ quantae tum scindunt hominem cuppedinis acres sollicitum curae quantique perinde timores! quidve superbia spurcitia ac petulantia? quantas efficiunt clades! quid luxus desidiaeque? haec igitur qui cuncta subegerit ex animoque expulerit dictis, non armis, nonne decebit hunc hominem numero divom dignarier esse? cum bene praesertim multa ac divinitus ipsis iam mortalibus e divis dare dicta suerit atque omnem rerum naturam pandere dictis.	/ How sharp are the cares of desire that then tear a troubled man apart, and how great, likewise, the fears! And what of pride, filth, and wantonness? What disasters they bring about! What of luxury and idleness? He, then, who has subdued all these and driven them from the mind with words, not weapons—will it not be fitting to count this man worthy of a place among the gods? Above all since he used to utter many sayings, finely and as if inspired, about the immortal gods themselves, and to lay open the whole nature of things in his words.

1 Liber is the Italian god of wine, identified with Bacchus. The monsters listed here and below are those slain in the labors of Hercules.

THE PLAN OF BOOK V

Lucretius announces that the world was born and will die, and lists the topics to come.

	LATIN	ENGLISH
5.55	Cuius ego ingressus vestigia dum rationes persequor ac doceo dictis, quo quaeque creata foedere sint, in eo quam sit durare necessum nec validas valeant aevi rescindere leges, quo genere in primis animi natura reperta est nativo primum consistere corpore creta, nec posse incolumem magnum durare per aevum, sed simulacra solere in somnis fallere mentem, cernere cum videamur eum quem vita reliquit, quod super est, nunc huc rationis detulit ordo, ut mihi mortali consistere corpore mundum nativomque simul ratio reddunda sit esse; et quibus ille modis congressus materiai fundarit terram caelum mare sidera solem lunaique globum; tum quae tellure animantes extiterint, et quae nullo sint tempore natae; quove modo genus humanum variante loquella coeperit inter se vesci per nomina rerum; et quibus ille modis divom metus insinuarit pectora, terrarum qui in orbi sancta tuetur fana lacus lucos aras simulacraque divom.	While I, following in his footsteps, pursue his reasonings and teach in my verses by what law all things were created, and how they must abide by it and cannot break the mighty laws of time— and here, first of all, the nature of the mind was shown to be made up of a body that had a birth, and unable to last unharmed through long ages, and that it is images that in sleep deceive the mind when we seem to see someone whom life has left— now, to go on, the order of my reasoning has brought me to this point, where I must show by reasoning that the world consists of a mortal body and was also born; and in what ways that coming together of matter established earth, sky, sea, stars, sun, and the moon's globe; then what living creatures arose from the earth, and which were never born at any time; and in what way the human race, with varied speech, began to converse with one another through the names of things; and in what ways that fear of the gods crept into human hearts which, throughout the world, keeps sacred shrines, lakes, groves, altars, and images of the gods.
	/ praeterea solis cursus lunaeque meatus expediam qua vi flectat natura gubernans; ne forte haec inter caelum terramque reamur libera sponte sua cursus lustrare perennis, morigera ad fruges augendas atque animantis, neve aliqua divom volvi ratione putemus. nam bene qui didicere deos securum agere aevom, si tamen interea mirantur qua ratione quaeque geri possint, praesertim rebus in illis quae supera caput aetheriis cernuntur in oris, rursus in antiquas referuntur religiones et dominos acris adsciscunt, omnia posse quos miseri credunt, ignari quid queat esse,	/ Besides, the courses of the sun and the wanderings of the moon— I will explain by what force steering nature guides them, so that we may not suppose that these, between heaven and earth, freely and of their own accord travel their everlasting rounds, obligingly helping crops and living creatures grow, or think that they are turned by some plan of the gods. For even those who have learned well that the gods lead a carefree life,

	LATIN	ENGLISH
	quid nequeat, finita potestas denique cuique qua nam sit ratione atque alte terminus haerens.	if all the same they wonder by what means each thing can be carried on, above all those things that are seen overhead in the regions of the upper air, are carried back again into the old religions and take on harsh masters, able to do all things, so the wretches believe, not knowing what can be and what cannot—in short, by what principle each thing has its limited power and its deep-set boundary stone.
5.91	Quod super est, ne te in promissis plura moremur, principio maria ac terras caelumque tuere; quorum naturam triplicem, tria corpora, Memmi, tris species tam dissimilis, tria talia texta, una dies dabit exitio, multosque per annos sustentata ruet moles et machina mundi. nec me animi fallit quam res nova miraque menti accidat exitium caeli terraeque futurum, et quam difficile id mihi sit pervincere dictis; ut fit ubi insolitam rem adportes auribus ante nec tamen hanc possis oculorum subdere visu nec iacere indu manus, via qua munita fidei proxima fert humanum in pectus templaque mentis. sed tamen effabor.	For the rest, not to keep you longer with promises, first of all, look at the seas, the lands, and the sky; their threefold nature, their three bodies, Memmius, three forms so unlike, three such fabrics— a single day will give them over to destruction, and, held up through many years, the great mass and machinery of the world will crash down. Nor am I unaware how new and strange it falls upon the mind, this destruction of heaven and earth to come, and how hard it is for me to prove it with words; as happens when you bring to the ears a thing unheard of before, yet cannot place it under the sight of the eyes or lay it in the hands, the paved road of belief that leads most directly into the human heart and the precincts of the mind. But still I will speak out.
	dictis dabit ipsa fidem res forsitan et graviter terrarum motibus ortis omnia conquassari in parvo tempore cernes. quod procul a nobis flectat fortuna gubernans, et ratio potius quam res persuadeat ipsa succidere horrisono posse omnia victa fragore.	Perhaps the event itself will lend my words belief, and when violent earthquakes arise you will see everything shaken to pieces in a short time. May steering fortune turn that far from us, and may reason rather than the event itself convince us that all things can be overcome and collapse with a terrible, roaring crash.
5.110	Qua prius adgrediar quam de re fundere fata sanctius et multo certa ratione magis quam Pythia quae tripode a Phoebi lauroque profatur, multa tibi expediam doctis solacia dictis; religione refrenatus ne forte rearis terras et solem et caelum, mare sidera lunam, corpore divino debere aeterna manere,	But before I set about declaring the decrees of fate on this matter, more holy and far more certain in reasoning than the Pythia pronounces from Phoebus' tripod and laurel, I will set out for you many consolations in learned words;

LATIN	ENGLISH
proptereaque putes ritu par esse Gigantum pendere eos poenas inmani pro scelere omnis, qui ratione sua disturbent moenia mundi praeclarumque velint caeli restinguere solem inmortalia mortali sermone notantes; quae procul usque adeo divino a numine distent inque deum numero quae sint indigna videri, notitiam potius praebere ut posse putentur quid sit vitali motu sensuque remotum.	so that you may not, held back by religion, perhaps think that the lands and the sun and the sky, the sea, stars, and moon, being of divine body, must remain forever, and so suppose it right that, like the Giants, all should pay the penalty for a monstrous crime who by their reasoning shake the walls of the world and would put out the brilliant sun in the sky, branding immortal things with mortal speech; whereas these are so far removed from divine power and so unworthy to be counted among the gods that they may rather be thought to give us a notion of what is without vital motion and sensation.[2]
/ quippe etenim non est, cum quovis corpore ut esse posse animi natura putetur consiliumque. sicut in aethere non arbor, non aequore salso nubes esse queunt neque pisces vivere in arvis nec cruor in lignis neque saxis sucus inesse, certum ac dispositumst ubi quicquid crescat et insit, sic animi natura nequit sine corpore oriri sola neque a nervis et sanguine longius esse. quod si posset enim, multo prius ipsa animi vis in capite aut umeris aut imis calcibus esse posset et innasci quavis in parte soleret, tandem in eodem homine atque in eodem vase manere.	/ For indeed it cannot be that in any body whatever the nature of the mind and judgment could be thought to exist. Just as no tree can exist in the sky, no clouds in the salt sea, nor can fish live in the fields, nor blood be found in wood, nor sap in stones— it is fixed and ordained where each thing is to grow and dwell— so the nature of the mind cannot arise alone without the body, nor exist far from sinews and blood. For if it could, far sooner could the power of the mind itself be in the head or shoulders or the bottom of the heels, and it would be wont to be born in any part at all, so long as it stayed in the same man and the same vessel.
/ quod quoniam nostro quoque constat corpore certum dispositumque videtur ubi esse et crescere possit seorsum anima atque animus, tanto magis infitiandum totum posse extra corpus formamque animalem putribus in glebis terrarum aut solis in igni aut in aqua durare aut altis aetheris oris. haud igitur constant divino praedita sensu, quandoquidem nequeunt vitaliter esse animata.	/ But since in our body too it is plainly fixed and ordained where spirit and mind can each exist and grow apart, all the more must we deny that they could, wholly outside the body and the living form, endure in crumbling clods of earth, or in the fire of the sun, or in water, or in the high regions of the upper air. These things, then, are not endowed with divine sensation, since they cannot be alive and animate.

2 The Giants rose against the gods and were punished.

THE GODS DID NOT MAKE THE WORLD

The gods live apart and made nothing for us; the world is too flawed to be divine work.

	LATIN	ENGLISH
5.146	Illud item non est ut possis credere, sedes esse deum sanctas in mundi partibus ullis. tenvis enim natura deum longeque remota sensibus ab nostris animi vix mente videtur; quae quoniam manuum tactum suffugit et ictum, tactile nil nobis quod sit contingere debet; tangere enim non quit quod tangi non licet ipsum. quare etiam sedes quoque nostris sedibus esse dissimiles debent, tenues de corpore eorum; quae tibi posterius largo sermone probabo.	Nor, likewise, can you believe that the holy dwellings of the gods are in any parts of the world. For the nature of the gods is fine and far removed from our senses, and is scarcely seen even by the mind's understanding; and since it escapes the touch and impact of hands, it must touch nothing that is tangible for us; for what cannot itself be touched cannot touch. Therefore their dwellings too must be unlike our dwellings, fine, like their bodies; which I will prove to you later at length.
5.156	Dicere porro hominum causa voluisse parare praeclaram mundi naturam proptereaque adlaudabile opus divom laudare decere aeternumque putare atque inmortale futurum, nec fas esse, deum quod sit ratione vetusta gentibus humanis fundatum perpetuo aevo, sollicitare suis ulla vi ex sedibus umquam nec verbis vexare et ab imo evertere summa, cetera de genere hoc adfingere et addere, Memmi, desiperest. quid enim inmortalibus atque beatis gratia nostra queat largirier emolumenti, ut nostra quicquam causa gerere adgrediantur? quidve novi potuit tanto post ante quietos inlicere ut cuperent vitam mutare priorem?	Further, to say that for the sake of mankind they chose to prepare the glorious nature of the world, and that therefore it is fitting to praise this praiseworthy work of the gods and to think it eternal and destined to be immortal, and that it is wrong for what was founded by the gods' ancient plan to last for the races of men for all time ever to be disturbed from its foundations by any force, or assailed with words and overturned from top to bottom, and to invent and add other notions of this kind, Memmius, is folly. For on immortal and blessed beings what profit could our gratitude bestow, that they should undertake to do anything for our sake? Or what new thing could, so long after, tempt beings at peace before to wish to change their former life?
	/ nam gaudere novis rebus debere videtur cui veteres obsunt; sed cui nihil accidit aegri tempore in ante acto, cum pulchre degeret aevom, quid potuit novitatis amorem accendere tali? quidve mali fuerat nobis non esse creatis? an, credo, in tenebris vita ac maerore iacebat, donec diluxit rerum genitalis origo? natus enim debet qui cumque est velle manere	/ For the one who, it seems, must delight in new things is he whom the old ones harm; but one who has met with nothing painful in the time gone by, while he lived his life happily — what could have kindled a love of novelty in such

LATIN	ENGLISH
in vita, donec retinebit blanda voluptas; qui numquam vero vitae gustavit amorem nec fuit in numero, quid obest non esse creatum? exemplum porro gignundis rebus et ipsa notities hominum divis unde insita primum est, quid vellent facere ut scirent animoque viderent, quove modost umquam vis cognita principiorum quidque inter sese permutato ordine possent.	a one? Or what harm would it have been for us never to have been created? Was life, I suppose, lying in darkness and grief until the creative origin of things dawned? For whoever has been born must want to stay in life, as long as caressing pleasure holds him; but for one who has never tasted the love of life and was never counted among the living, what harm is it not to have been created? Then again, where did a model for creating things, and the very notion of human beings, first come to be implanted in the gods, so that they knew and saw in their minds what they wished to make? Or how was the power of the first beginnings ever discovered, and what they could do when their order was changed among themselves,
/ si non ipsa dedit speciem natura creandi? namque ita multa modis multis primordia rerum ex infinito iam tempore percita plagis ponderibusque suis consuerunt concita ferri omnimodisque coire atque omnia pertemptare, quae cumque inter se possint congressa creare, ut non sit mirum, si in talis disposituras deciderunt quoque et in talis venere meatus, qualibus haec rerum geritur nunc summa novando.	/ if nature herself had not given a model of creation? For so many first beginnings of things, in many ways, driven on by blows from infinite time past and set moving by their own weights, have been accustomed to travel and to come together in every way and try out everything that they could create by meeting with one another, that it is no wonder if they also fell into such arrangements and came into such courses as those by which this sum of things now goes on, renewing itself.
5.195 Quod [si] iam rerum ignorem primordia quae sint, hoc tamen ex ipsis caeli rationibus ausim confirmare aliisque ex rebus reddere multis, nequaquam nobis divinitus esse paratam naturam rerum: tanta stat praedita culpa. principio quantum caeli tegit impetus ingens, inde avidam partem montes silvaeque ferarum possedere, tenent rupes vastaeque paludes et mare, quod late terrarum distinet oras. inde duas porro prope partis fervidus ardor adsiduusque geli casus mortalibus aufert. quod super est arvi, tamen id natura sua vi sentibus obducat, ni vis humana resistat	Even if I did not know what the first beginnings of things are, I would dare to affirm this from the very workings of the sky, and to show it from many other things: that the nature of things was by no means made ready for us by divine power, so great are the flaws with which it stands endowed. First, of all that the vast sweep of the sky covers, a greedy share is held by mountains and by forests full of wild beasts; crags and vast marshes take up part,

LATIN	ENGLISH
vitai causa valido consueta bidenti ingemere et terram pressis proscindere aratris. si non fecundas vertentes vomere glebas terraique solum subigentes cimus ad ortus.	and the sea, which holds the shores of the lands far apart. Next, nearly two parts are taken from mortals by scorching heat and the constant fall of frost. What is left of the land, nature by her own force would still cover over with thorns, unless human effort resisted, used, for the sake of life, to groan over the stout mattock and to cut through the earth by pressing down on the plow. If we did not, turning the fertile clods with the plowshare and working the soil of the earth, call forth to birth,
/ sponte sua nequeant liquidas existere in auras. et tamen inter dum magno quaesita labore cum iam per terras frondent atque omnia florent, aut nimiis torret fervoribus aetherius sol aut subiti peremunt imbris gelidaeque pruinae flabraque ventorum violento turbine vexant. praeterea genus horriferum natura ferarum humanae genti infestum terraque marique cur alit atque auget? cur anni tempora morbos adportant? quare mors inmatura vagatur? tum porro puer, ut saevis proiectus ab undis navita, nudus humi iacet infans indigus omni vitali auxilio, cum primum in luminis oras nixibus ex alvo matris natura profudit, vagituque locum lugubri complet, ut aequumst cui tantum in vita restet transire malorum.	/ they could not of their own accord come out into the clear air. And even so, at times, when things won with great labor are already in leaf across the land and all in flower, either the sun in the sky scorches them with too much heat, or sudden rains and icy frosts destroy them, and blasts of wind harry them with violent whirlwinds. Besides, the fearsome breed of wild beasts, hostile to the human race by land and sea—why does nature feed and increase it? Why do the seasons of the year bring diseases? Why does untimely death roam abroad? Then again, the child, like a sailor cast ashore by the savage waves, lies naked on the ground, unable to speak, in need of every aid for life, when first into the shores of light nature has thrust him with birth pangs from his mother's womb, and he fills the place with mournful wailing, as is only right for one who has so much evil left to pass through in life.
/ at variae crescunt pecudes armenta feraeque nec crepitacillis opus est nec cuiquam adhibendast almae nutricis blanda atque infracta loquella	/ But the various flocks and herds and wild beasts grow up; they need no rattles, nor does any of them need

	LATIN	ENGLISH
	nec varias quaerunt vestes pro tempore caeli, denique non armis opus est, non moenibus altis, qui sua tutentur, quando omnibus omnia large tellus ipsa parit naturaque daedala rerum.	the coaxing, broken baby talk of a kindly nurse, nor do they seek different clothes for each season of the sky; lastly, they need no weapons, no high walls, to protect what is theirs, since for all of them all things are produced in plenty by the earth herself and by nature, the skillful maker of things.

PROOFS THAT THE WORLD IS MORTAL

Earth, water, air and fire are consumed and renewed, stones decay, and human history is recent.

	LATIN	ENGLISH
5.235	Principio quoniam terrai corpus et umor aurarumque leves animae calidique vapores, e quibus haec rerum consistere summa videtur, omnia nativo ac mortali corpore constant, debet eodem omnis mundi natura putari. quippe etenim, quorum partis et membra videmus corpore nativo mortalibus esse figuris, haec eadem ferme mortalia cernimus esse et nativa simul. qua propter maxima mundi cum videam membra ac partis consumpta regigni, scire licet caeli quoque item terraeque fuisse principiale aliquod tempus clademque futuram.	First, since the body of earth and water, the light breaths of the breezes and hot vapors, of which this sum of things seems to be composed, all consist of a body that is born and mortal, the whole nature of the world must be thought to be of the same kind. For indeed, things whose parts and members we see to be of a body that is born and of mortal shapes— these same things we generally see to be mortal and born as well. So, since I see the greatest members and parts of the world consumed and born again, we may know that for heaven and earth too there was some time of beginning, and there will be destruction.
5.247	Illud in his rebus ne corripuisse rearis me mihi, quod terram atque ignem mortalia sumpsi esse neque umorem dubitavi aurasque perire atque eadem gigni rursusque augescere dixi. principio pars terrai non nulla, perusta solibus adsiduis, multa pulsata pedum vi, pulveris exhalat nebulam nubesque volantis, quas validi toto dispergunt aëre venti. pars etiam glebarum ad diluviem revocatur imbribus et ripas radentia flumina rodunt. praeterea pro parte sua, quod cumque alit auget, redditur; et quoniam dubio procul esse videtur omniparens eadem rerum commune sepulcrum. ergo terra tibi libatur et aucta recrescit.	In this matter, do not think that I have taken it for granted on my own authority when I assumed that earth and fire are mortal, and did not doubt that water and air perish, and said that these same things are born and grow again. First, no small part of the earth, scorched through by unceasing suns and pounded by the force of many feet, breathes out a mist of dust and flying clouds, which strong winds scatter through the whole air. Part of the soil, too, is summoned back into flood by rains, and rivers scrape and gnaw away their banks. Besides, whatever feeds and increases other things is, for its share, paid back; and since, beyond doubt, it is clear

	LATIN	ENGLISH
		that the mother of all is likewise the common tomb of things, the earth, you see, is worn away and, increased, grows back.
5.261	Quod super est, umore novo mare flumina fontes semper abundare et latices manare perennis nil opus est verbis: magnus decursus aquarum undique declarat. sed primum quicquid aquai tollitur in summaque fit ut nihil umor abundet, partim quod validi verrentes aequora venti deminuunt radiisque retexens aetherius sol, partim quod supter per terras diditur omnis; percolatur enim virus retroque remanat materies umoris et ad caput amnibus omnis convenit, inde super terras fluit agmine dulci qua via secta semel liquido pede detulit undas.	Next, that sea, rivers, and springs always overflow with new water, and that streams well up unceasingly, there is no need of words: the great downrush of waters on every side declares it. But the first of the water, whatever it be, is taken off, and so it happens that on the whole there is no excess of water, partly because strong winds sweeping the seas diminish it, and so does the sun in the sky, unraveling it with its rays, partly because it is spread about beneath, through all the lands; for the brine is strained out, and the matter of the moisture seeps back and all gathers at the rivers' source, and from there flows over the lands in a fresh column wherever a channel, once cut, has carried down the waves on liquid foot.
5.273	Aëra nunc igitur dicam, qui corpore toto innumerabiliter privas mutatur in horas. semper enim, quod cumque fluit de rebus, id omne aëris in magnum fertur mare; qui nisi contra corpora retribuat rebus recreetque fluentis, omnia iam resoluta forent et in aëra versa. haut igitur cessat gigni de rebus et in res reccidere, adsidue quoniam fluere omnia constat.	Now, then, I will speak of air, which in its whole body is changed in countless ways every hour. For always, whatever flows off from things, all of it is carried into the great sea of air; and unless air in turn gave back bodies to things and restored them as they flowed away, all things would by now have been dissolved and turned into air. So air never ceases to be born from things and to fall back into things, since it is certain that all things are constantly flowing.
5.281	Largus item liquidi fons luminis, aetherius sol, inrigat adsidue caelum candore recenti suppeditatque novo confestim lumine lumen. nam primum quicquid fulgoris disperit ei, quo cumque accidit. id licet hinc cognoscere possis, quod simul ac primum nubes succedere soli coepere et radios inter quasi rumpere lucis, extemplo inferior pars horum disperit omnis terraque inumbratur qua nimbi cumque feruntur;	Likewise that generous fountain of clear light, the sun in the sky, constantly floods the heavens with fresh brightness and at once supplies light with new light. For the first of its brightness, whatever it be, is lost to it, wherever it falls. You can learn this from the fact that as soon as clouds begin to pass beneath the

	LATIN	ENGLISH
	ut noscas splendore novo res semper egere et primum iactum fulgoris quemque perire nec ratione alia res posse in sole videri, perpetuo ni suppeditet lucis caput ipsum.	sun and, as it were, to break the rays of light between, at once the lower part of them is all lost and the earth is shadowed wherever the storm clouds are borne; so you may know that things always need new brilliance, that each first cast of brightness perishes, and that things could not be seen in the sunlight in any other way unless the very source of light kept up a constant supply.
	/ quin etiam nocturna tibi, terrestria quae sunt, lumina, pendentes lychni claraeque coruscis fulguribus pingues multa caligine taedae consimili properant ratione, ardore ministro, suppeditare novom lumen, tremere ignibus instant, instant, nec loca lux inter quasi rupta relinquit: usque adeo properanter ab omnibus ignibus ei exitium celeri celeratur origine flammae. sic igitur solem lunam stellasque putandum ex alio atque alio lucem iactare subortu et primum quicquid flammarum perdere semper, inviolabilia haec ne credas forte vigere.	/ Indeed, even our lights at night, those of the earth— hanging lamps, and torches bright with flashing gleams, rich with much smoky darkness— hurry in the same way, their heat serving them, to supply new light; they press on to flicker with their fires, they press on, and the light leaves no places broken, as it were, between: so hastily, from all its fires, is its end sped on by the speedy birth of flame. So, then, we must think that sun, moon, and stars throw out their light from ever new sources rising up and always lose the first of their flames, whatever it be, lest you should perhaps believe that these things flourish inviolable.
5.306	Denique non lapides quoque vinci cernis ab aevo, non altas turris ruere et putrescere saxa, non delubra deum simulacraque fessa fatisci nec sanctum numen fati protollere finis posse neque adversus naturae foedera niti? denique non monimenta virum dilapsa videmus, [quaerere proporro, sibi cumque senescere credas,] non ruere avolsos silices a montibus altis nec validas aevi vires perferre patique finiti? neque enim caderent avolsa repente, ex infinito quae tempore pertolerassent omnia tormenta aetatis, privata fragore.	Again, do you not see that even stones are conquered by time, that tall towers fall and rocks crumble, that shrines and images of the gods grow weary and crack, and that holy divinity cannot extend the bounds of fate or struggle against the laws of nature? Again, do we not see the monuments of men fallen to ruin, [to ask further, whether you believe they grow old for themselves,] and flints torn from high mountains come crashing down, unable to bear and endure the mighty forces of a time that is finite? For they would not suddenly fall, torn away,

	LATIN	ENGLISH
		if from infinite time they had endured all the tortures of age without breaking.
5.318	Denique iam tuere hoc, circum supraque quod omne continet amplexu terram: si procreat ex se omnia, quod quidam memorant, recipitque perempta, totum nativum mortali corpore constat. nam quod cumque alias ex se res auget alitque, deminui debet, recreari, cum recipit res.	Again, now look at this, which all around and above holds the whole earth in its embrace: if it begets from itself all things, as some say, and takes them back when destroyed, the whole of it is made of a body that is born and mortal. For whatever increases and feeds other things from itself must be diminished, and restored when it takes things back.
5.324	Praeterea si nulla fuit genitalis origo terrarum et caeli semperque aeterna fuere, cur supera bellum Thebanum et funera Troiae non alias alii quoque res cecinere poëtae? quo tot facta virum totiens cecidere neque usquam aeternis famae monimentis insita florent? verum, ut opinor, habet novitatem summa recensque naturast mundi neque pridem exordia cepit. quare etiam quaedam nunc artes expoliuntur, nunc etiam augescunt; nunc addita navigiis sunt multa, modo organici melicos peperere sonores, denique natura haec rerum ratioque repertast nuper, et hanc primus cum primis ipse repertus nunc ego sum in patrias qui possim vertere voces.	Besides, if there was no creative origin of earth and sky, and they have always been eternal, why, before the Theban war and the fall of Troy, did other poets not also sing of other things? Where have so many deeds of men so often vanished, and why do they nowhere flourish, grafted onto eternal monuments of fame? But, I think, the whole is new, and the nature of the world is recent, and it took its beginning not long ago. That is why even now some arts are being refined, even now are growing; now much has been added to ships, only lately have musicians given birth to melodious sounds; lastly, this nature of things, this account of it, was discovered lately, and I myself am found first among the first who can now render it into the words of our fathers.
5.338	Quod si forte fuisse ante hac eadem omnia credis, sed periise hominum torrenti saecla vapore, aut cecidisse urbis magno vexamine mundi, aut ex imbribus adsiduis exisse rapaces per terras amnes atque oppida coperuisse. tanto quique magis victus fateare necessest exitium quoque terrarum caelique futurum; nam cum res tantis morbis tantisque periclis temptarentur, ibi si tristior incubuisset causa, darent late cladem magnasque ruinas. nec ratione alia mortales esse videmur, inter nos nisi quod morbis aegrescimus isdem atque illi quos a vita natura removit.	But if perhaps you believe that all these things existed before, but that the generations of men perished in scorching heat, or that cities fell in some great upheaval of the world, or that after incessant rains ravening rivers came forth across the lands and buried the towns, all the more must you be defeated and admit that there will be a destruction of earth and sky too; for when things were assailed by such great dis-

LATIN	ENGLISH
	eases and such great dangers, if a grimmer cause had then pressed upon them, they would have spread destruction far and wide, and great ruin. And by no other reasoning do we see that we are mortal than that we fall sick among ourselves with the same diseases as those whom nature has removed from life.
5.351 Praeterea quae cumque manent aeterna necessust aut, quia sunt solido cum corpore, respuere ictus nec penetrare pati sibi quicquam quod queat artas dissociare intus partis, ut materiai corpora sunt, quorum naturam ostendimus ante, aut ideo durare aetatem posse per omnem, plagarum quia sunt expertia, sicut inane est, quod manet intactum neque ab ictu fungitur hilum, aut etiam quia nulla loci sit copia circum, quo quasi res possint discedere dissoluique, sicut summarum summa est aeterna, neque extra qui locus est quo dissiliant neque corpora sunt quae possint incidere et valida dissolvere plaga.	Besides, whatever things endure forever must either, being of solid body, repel blows and let nothing pierce them that could unfasten their close-packed parts within, like the bodies of matter, whose nature we have shown before; or be able to last through all time because they are free from blows, as the void is, which remains untouched and is not affected a whit by any blow; or else because there is no store of space around them into which things might, as it were, part and be dissolved— as the sum of all sums is eternal, and outside it there is no place into which things may scatter, nor bodies that could fall on it and dissolve it with a heavy blow.
/ at neque, uti docui, solido cum corpore mundi naturast, quoniam admixtumst in rebus inane, nec tamen est ut inane, neque autem corpora desunt, ex infinito quae possint forte coorta corruere hanc rerum violento turbine summam aut aliam quamvis cladem inportare pericli, nec porro natura loci spatiumque profundi deficit, exspargi quo possint moenia mundi, aut alia quavis possunt vi pulsa perire. haut igitur leti praeclusa est ianua caelo nec soli terraeque neque altis aequoris undis, sed patet immani et vasto respectat hiatu. quare etiam nativa necessumst confiteare haec eadem; neque enim, mortali corpore quae sunt, ex infinito iam tempore adhuc potuissent inmensi validas aevi contemnere vires.	/ But, as I have shown, the nature of the world is not of solid body, since void is mixed into things; nor yet is it like the void; nor, again, are bodies lacking that might by chance rise up out of the infinite and overwhelm this sum of things in a violent whirlwind, or bring on it some other kind of dangerous disaster; nor, further, is there any lack of room, of space in the deep, into which the walls of the world could be scattered; or else they can perish, struck by any other force. So the door of death is not shut against the sky, nor against sun and earth, nor the deep waters of the sea, but stands open and gazes at them with a vast and monstrous gaping mouth.

LATIN	ENGLISH
	And so you must admit that these same things were born as well; for things that are of mortal body could not, from infinite time until now, have defied the mighty forces of immeasurable age.
5.380 Denique tantopere inter se cum maxima mundi pugnent membra, pio nequaquam concita bello, nonne vides aliquam longi certaminis ollis posse dari finem, vel cum sol et vapor omnis omnibus epotis umoribus exsuperarint? quod facere intendunt, neque adhuc conata patrantur; tantum suppeditant amnes ultraque minantur omnia diluviare ex alto gurgite ponti: ne quiquam, quoniam verrentes aequora venti deminuunt radiisque retexens aetherius sol, et siccare prius confidunt omnia posse quam liquor incepti possit contingere finem. tantum spirantes aequo certamine bellum magnis [inter se] de rebus cernere certant, cum semel interea fuerit superantior ignis et semel, ut fama est, umor regnarit in arvis.	Again, since the greatest members of the world fight so fiercely among themselves, stirred up in a war that is anything but righteous, do you not see that some end to their long contest may be granted them—when, for instance, the sun and every heat have drunk up all the waters and prevailed? This they are striving to do, but so far their attempts are unfulfilled; so much do the rivers supply, and they threaten besides to flood everything from the deep gulf of the sea: in vain, since the winds sweeping the seas diminish it, and so does the sun in the sky, unraveling it with its rays, and they are confident they can dry everything up before the water can reach the end of its undertaking. So fiercely do they breathe war in an evenly matched contest, striving among themselves to decide the issue over mighty things; though in the meantime fire has once had the upper hand, and once, as the story goes, water reigned over the fields.
/ ignis enim superavit et ambiens multa perussit, avia cum Phaethonta rapax vis solis equorum aethere raptavit toto terrasque per omnis. at pater omnipotens ira tum percitus acri magnanimum Phaethonta repenti fulminis ictu deturbavit equis in terram, Solque cadenti obvius aeternam succepit lampada mundi disiectosque redegit equos iunxitque trementis, inde suum per iter recreavit cuncta gubernans, scilicet ut veteres Graium cecinere poëtae. quod procul a vera nimis est ratione repulsum. ignis enim superare potest ubi materiai ex infinito sunt corpora plura coorta; inde cadunt vires aliqua ratione revictae, aut pereunt res exustae torrentibus auris.	/ For fire prevailed and, ranging about, burned up much, when the headlong force of the Sun's horses swept Phaethon off the path through the whole sky and over all the lands. But the almighty father, roused then to fierce anger, with a sudden stroke of the thunderbolt dashed great-hearted Phaethon from the horses to the earth; and the Sun, meeting him as he fell, caught the everlasting lamp of the world, brought back the scattered horses and yoked them, trembling, then, guiding them along his own path, restored all things—

	LATIN	ENGLISH
		so, of course, the old poets of the Greeks have sung. But this is driven far indeed from true reasoning. For fire can prevail when more bodies of matter have risen up out of the infinite; then their forces fall, somehow overcome, or else things perish, burnt up by scorching blasts.[3]
	/ umor item quondam coepit superare coortus, ut fama est, hominum vitas quando obruit undis; inde ubi vis aliqua ratione aversa recessit, ex infinito fuerat quae cumque coorta, constiterunt imbres et flumina vim minuerunt.	/ Water likewise once began to prevail, rising up, as the story goes, when it overwhelmed the lives of men with its waves; then, when that force was somehow turned aside and withdrew, all that had risen up out of the infinite, the rains stopped and the rivers lessened their force.

HOW THE WORLD WAS FORMED

Colliding first beginnings sort themselves into earth, sea, air, ether and the heavenly fires.

	LATIN	ENGLISH
5.416	Sed quibus ille modis coniectus materiai fundarit terram et caelum pontique profunda, solis lunai cursus, ex ordine ponam. nam certe neque consilio primordia rerum ordine se suo quaeque sagaci mente locarunt nec quos quaeque darent motus pepigere profecto; sed quia multa modis multis primordia rerum ex infinito iam tempore percita plagis ponderibusque suis consuerunt concita ferri omnimodisque coire atque omnia pertemptare, quae cumque inter se possent congressa creare, propterea fit uti magnum volgata per aevom omnigenus coetus et motus experiundo tandem conveniant ea quae coniecta repente magnarum rerum fiunt exordia saepe, terrai maris et caeli generisque animantum.	But in what ways that throwing-together of matter established earth and sky and the depths of the sea, and the courses of sun and moon, I will set out in order. For certainly the first beginnings of things did not by design place themselves each in its order with a shrewd mind, nor, surely, did they bargain over what motions each should make; but because many first beginnings of things, in many ways, driven on by blows from infinite time past and set moving by their own weights, have been accustomed to travel and to come together in every way and try out everything that they could create by meeting with one another, so it comes about that, spread abroad through a vast age, by trying unions and motions of every kind, at last those come together which, suddenly thrown together, often become the beginnings of great things,

3 Phaethon, son of the Sun, lost control of his father's chariot; Jupiter struck him down with a thunderbolt.

	LATIN	ENGLISH
		of earth and sea and sky and the race of living creatures.
5.432	Hic neque tum solis rota cerni lumine largo altivolans poterat nec magni sidera mundi nec mare nec caelum nec denique terra neque aër nec similis nostris rebus res ulla videri, sed nova tempestas quaedam molesque coorta. diffugere inde loci partes coepere paresque cum paribus iungi res et discludere mundum membraque dividere et magnas disponere partes omnigenis e principiis, discordia quorum intervalla vias conexus pondera plagas concursus motus turbabat proelia miscens propter dissimilis formas variasque figuras, quod non omnia sic poterant coniuncta manere nec motus inter sese dare convenientis, hoc est, a terris altum secernere caelum, et sorsum mare, uti secreto umore pateret, seorsus item puri secretique aetheris ignes.	At that point the sun's wheel could not be seen, soaring on high with its abundant light, nor the stars of the great world, nor sea nor sky, nor, lastly, earth or air, nor anything at all like the things we know, but only a strange kind of storm, a mass that had risen up. Then parts began to fly apart, and like things to join with like, and to mark out the world, to divide its members and arrange its great parts out of first beginnings of every kind, whose discord threw into confusion their intervals, paths, connections, weights, blows, collisions, motions, stirring up battles among them because of their unlike forms and varied shapes, since not all of them could stay joined in that way nor produce motions fitting to one another— that is, to separate the lofty sky from the lands, and the sea apart, so that it might spread out with its water set apart, and likewise apart the fires of the pure and separate upper air.
5.449	Quippe etenim primum terrai corpora quaeque, propterea quod erant gravia et perplexa, coibant in medio atque imas capiebant omnia sedes; quae quanto magis inter se perplexa coibant, tam magis expressere ea quae mare sidera solem lunamque efficerent et magni moenia mundi; omnia enim magis haec e levibus atque rutundis seminibus multoque minoribus sunt elementis quam tellus.	For first of all the bodies of earth, each one, because they were heavy and entangled, came together in the middle and all took up the lowest seats; and the more tightly they came together, entangled with each other, the more they squeezed out the stuff that would make sea, stars, sun, and moon, and the walls of the great world; for all of these consist of smoother and rounder seeds, and of elements much smaller, than earth does.
	ideo per rara foramina terrae partibus erumpens primus se sustulit aether ignifer et multos secum levis abstulit ignis, non alia longe ratione ac saepe videmus, aurea cum primum gemmantis rore per herbas matutina rubent radiati lumina solis exhalantque lacus nebulam fluviique perennes ipsaque ut inter dum tellus fumare videtur; omnia quae sursum cum conciliantur, in alto	So, through the loose-knit pores of the earth, bursting from its parts, the fire-bearing ether rose first and, being light, carried many fires off with it, in much the same way as we often see when, across the grass jeweled with dew, the golden morning light of the radiant sun first glows red, and lakes and ever-flowing rivers breathe out

LATIN	ENGLISH
corpore concreto subtexunt nubila caelum. sic igitur tum se levis ac diffusilis aether corpore concreto circum datus undique saepsit et late diffusus in omnis undique partis omnia sic avido complexu cetera saepsit.	mist, and even the earth itself at times seems to smoke; and when all these gather upward, high above, their bodies condensing, they weave clouds beneath the sky. So in this way the light, expansive ether then condensed its body, poured round, and fenced itself in on every side, and, spreading widely in all directions everywhere, thus fenced in everything else in its greedy embrace.
/ hunc exordia sunt solis lunaeque secuta, interutrasque globi quorum vertuntur in auris; quae neque terra sibi adscivit nec maximus aether, quod neque tam fuerunt gravia ut depressa sederent, nec levia ut possent per summas labier oras, et tamen interutrasque ita sunt, ut corpora viva versent et partes ut mundi totius extent; quod genus in nobis quaedam licet in statione membra manere, tamen cum sint ea quae moveantur. his igitur rebus retractis terra repente, maxuma qua nunc se ponti plaga caerula tendit, succidit et salso suffudit gurgite fossas.	/ After it came the beginnings of sun and moon, whose globes revolve in the airs between the two; neither earth nor the vast ether claimed these for itself, since they were neither so heavy as to sink and settle, nor so light that they could glide along the topmost shores; and yet they lie between the two in such a way that they turn as living bodies and stand out as parts of the whole world; just as in us certain limbs may stay at rest, while there are others that move. So, when these things had been withdrawn, the earth suddenly, where now the sea's vast blue expanse stretches out, sank down and flooded its hollows with salt water.
/ inque dies quanto circum magis aetheris aestus et radii solis cogebant undique terram verberibus crebris extrema ad limina fartam in medio ut propulsa suo condensa coiret, tam magis expressus salsus de corpore sudor augebat mare manando camposque natantis, et tanto magis illa foras elapsa volabant corpora multa vaporis et aëris altaque caeli densabant procul a terris fulgentia templa. sidebant campi, crescebant montibus altis ascensus; neque enim poterant subsidere saxa nec pariter tantundem omnes succumbere partis.	/ And day by day, the more the ether's heat all round and the sun's rays pressed the earth on every side with frequent blows, packing it tight to its outermost edges, so that, driven inward, it grew dense and drew together at its center, the more the salt sweat squeezed from its body swelled the sea as it oozed, and the swimming plains, and the more those many bodies of heat and air slipped out and flew off, and far from the earth thickened the high and shining regions of the sky. The plains sank down; the slopes of the lofty mountains grew; for the rocks could not subside, nor could all parts sink equally to the same degree.

	LATIN	ENGLISH
5.495	Sic igitur terrae concreto corpore pondus constitit atque omnis mundi quasi limus in imum confluxit gravis et subsedit funditus ut faex; inde mare, inde aër, inde aether ignifer ipse corporibus liquidis sunt omnia pura relicta et leviora aliis alia, et liquidissimus aether atque levissimus aërias super influit auras nec liquidum corpus turbantibus aëris auris commiscet; sinit haec violentis omnia verti turbinibus, sinit incertis turbare procellis, ipse suos ignis certo fert impete labens. nam modice fluere atque uno posse aethera nisu significat Pontos, mare certo quod fluit aestu unum labendi conservans usque tenorem.	So, then, the weight of earth settled, its body condensed, and all the world's sludge, as it were, flowed heavily to the bottom and sank to the depths like dregs; then sea, then air, then the fire-bearing ether itself were all left pure, with liquid bodies, some lighter than others; and ether, most liquid and lightest of all, flows above the breezes of air and does not mix its liquid body with the air's turbulent breezes; it lets all these be whirled by violent tornadoes, lets them churn in fitful storms, while it glides on, carrying its fires in a steady sweep. For that the ether can flow evenly and with a single thrust is shown by the Pontus, a sea that flows with a steady current, keeping always to a single course as it glides.[4]

THE HEAVENS

Possible causes are given for the stars' motions, the sun's size, day and night, the moon and eclipses.

	LATIN	ENGLISH
5.509	Motibus astrorum nunc quae sit causa canamus. principio magnus caeli si vortitur orbis, ex utraque polum parti premere aëra nobis dicendum est extraque tenere et claudere utrimque; inde alium supra fluere atque intendere eodem quo volvenda micant aeterni sidera mundi; aut alium supter, contra qui subvehat orbem, ut fluvios versare rotas atque austra videmus.	Now let us sing what causes the motions of the stars. First, if the great sphere of the sky revolves, we must say that air presses on the pole at either end and holds it from outside and closes it in on both sides; and then that another air flows above and strains in the same direction in which the stars of the eternal world roll glittering; or else another below, to drive the sphere up the other way, as we see rivers turn wheels and their scoops.
	/ est etiam quoque uti possit caelum omne manere in statione, tamen cum lucida signa ferantur, sive quod inclusi rapidi sunt aetheris aestus quaerentesque viam circum versantur et ignes passim per caeli volvunt summania templa, sive aliunde fluens alicunde extrinsecus aër versat agens ignis, sive ipsi serpere possunt,	/ It is also possible that the whole sky stays at rest, while the shining constellations are carried along, either because swift tides of ether are shut inside and, seeking a way out, whirl round and round and roll the fires everywhere through the sky's night-thundering

4 The Pontus is the Black Sea, whose surface current runs steadily outward through the Bosporus.

	LATIN	ENGLISH
	quo cuiusque cibus vocat atque invitat euntis, flammea per caelum pascentis corpora passim.	regions, or because air, flowing from some other place outside, drives the fires and turns them, or because they can creep on their own, going wherever each one's food calls and invites them, grazing their fiery bodies all across the sky.
	/ nam quid in hoc mundo sit eorum ponere certum difficilest; sed quid possit fiatque per omne in variis mundis varia ratione creatis, id doceo plurisque sequor disponere causas, motibus astrorum quae possint esse per omne; e quibus una tamen sit et haec quoque causa necessest, quae vegeat motum signis; sed quae sit earum praecipere haud quaquamst pedetemptim progredientis.	/ For which of these is true in our world it is hard to say for certain; but what can happen and does happen throughout the universe, in the various worlds created in various ways, that I teach, and I go on to set out several causes that can account for the motions of the stars throughout the universe; yet one of these must also be the cause here that gives the constellations their motion; but to lay down which of them it is is not at all for one who advances step by step.
5.534	Terraque ut in media mundi regione quiescat, evanescere paulatim et decrescere pondus convenit atque aliam naturam supter habere ex ineunte aevo coniunctam atque uniter aptam partibus aëriis mundi, quibus insita vivit. propterea non est oneri neque deprimit auras, ut sua cuique homini nullo sunt pondere membra nec caput est oneri collo nec denique totum corporis in pedibus pondus sentimus inesse; at quae cumque foris veniunt inpostaque nobis pondera sunt laedunt, permulto saepe minora. usque adeo magni refert quid quaeque queat res. sic igitur tellus non est aliena repente allata atque auris aliunde obiecta alienis, sed pariter prima concepta ab origine mundi certaque pars eius, quasi nobis membra videntur.	For the earth to rest in the middle region of the world, its weight must gradually fade and lessen, and it must have another nature underneath, joined to it from the beginning of time and fitted into one with the airy parts of the world in which it lives, embedded. That is why it is no burden and does not press down on the air, just as a person's own limbs have no weight for him, nor is the head a burden to the neck, nor, in short, do we feel the whole weight of the body resting on the feet; but whatever weights come from outside and are laid on us hurt us, though often much smaller. So much does it matter what each thing can do. So the earth is not some alien thing suddenly brought in and thrust from elsewhere into alien air, but was conceived together with it at the world's first origin, a fixed part of it, as our limbs are seen to be of us.
5.550	Praeterea grandi tonitru concussa repente terra supra quae se sunt concutit omnia motu; quod facere haut ulla posset ratione, nisi esset partibus aëriis mundi caeloque revincta;	Besides, when shaken suddenly by a great thunderclap, the earth shakes everything above it with its motion;

	LATIN	ENGLISH
	nam communibus inter se radicibus haerent ex ineunte aevo coniuncta atque uniter aucta.	which it could in no way do unless it were bound fast to the airy parts of the world and to the sky; for they cling together by common roots, joined from the beginning of time and grown into one.
5.556	Nonne vides etiam quam magno pondere nobis sustineat corpus tenuissima vis animai, propterea quia tam coniuncta atque uniter apta est?	Don't you see, too, how great a weight of body the spirit's most slender power sustains for us, because it is so closely joined and fitted into one with it?
5.559	Denique iam saltu pernici tollere corpus quid potis est nisi vis animae, quae membra gubernat? iamne vides quantum tenuis natura valere possit, ubi est coniuncta gravi cum corpore, ut aër coniunctus terris et nobis est animi vis?	Then again, what can lift the body in a nimble leap but the power of the spirit, which steers the limbs? Now do you see how much a slender nature can do when it is joined to a heavy body, as air is joined to the earth, and the power of the mind to us?
5.564	Nec nimio solis maior rota nec minor ardor esse potest, nostris quam sensibus esse videtur. nam quibus e spatiis cumque ignes lumina possunt adiicere et calidum membris adflare vaporem, nil magnis intervallis de corpore libant flammarum, nihil ad speciem est contractior ignis. proinde, calor quoniam solis lumenque profusum perveniunt nostros ad sensus et loca fulgent, forma quoque hinc solis debet filumque videri, nil adeo ut possis plus aut minus addere vere. [perveniunt nostros ad sensus et loca fulgent] lunaque sive notho fertur loca lumine lustrans, sive suam proprio iactat de corpore lucem, quidquid id est, nihilo fertur maiore figura quam, nostris oculis qua cernimus, esse videtur.	Nor can the sun's wheel be much larger, nor its blaze much smaller, than it appears to our senses. For from whatever distances fires can cast their light and breathe warm heat upon our limbs, the great intervals subtract nothing from the body of the flames, and the fire looks not a bit shrunken. So, since the sun's heat and the light it pours out reach our senses and make places shine, the sun's shape and size too must be seen from here as they are, so that you can truly make it neither bigger nor smaller. [reach our senses and make places shine] And the moon, whether she moves lighting places with borrowed light or throws out her own light from her own body, whatever the case, moves with a shape no larger than the one she appears to have as we see her with our eyes.
	/ nam prius omnia, quae longe semota tuemur aëra per multum, specie confusa videntur quam minui filum. quapropter luna necesse est, quandoquidem claram speciem certamque figuram praebet, ut est oris extremis cumque notata, quanta quoquest, tanta hinc nobis videatur in alto. postremo quos cumque vides hinc aetheris ignes, scire licet perquam pauxillo posse minores esse vel exigua maioris parte brevique. quandoquidem quos cumque in terris cernimus [ignes], dum tremor [et] clarus dum cernitur ardor eorum,	/ For everything we see far off, through a great deal of air, looks blurred in appearance before its size seems to shrink. So the moon, since it presents a clear appearance and a definite shape, its outline sharply marked by its outer edges, as large as it really is, so large it must look to us from here on high. Lastly, whatever fires of the ether you see from

	LATIN	ENGLISH
	perparvom quiddam inter dum mutare videntur alteram utram in partem filum, quo longius absunt.	here, you may know they can be smaller by only a very little, or larger by some slight, small fraction. For whatever fires we see on earth, as long as their flicker and their bright blaze are visible, seem at times to change their size by a very small amount one way or the other, the farther off they are.
5.592	Illud item non est mirandum, qua ratione tantulus ille queat tantum sol mittere lumen, quod maria ac terras omnis caelumque rigando compleat et calido perfundat cuncta vapore. [quanta quoquest tanta hinc nobis videatur in alto] nam licet hinc mundi patefactum totius unum largifluum fontem scatere atque erumpere lumen, ex omni mundo quia sic elementa vaporis undique conveniunt et sic coniectus eorum confluit, ex uno capite hic ut profluat ardor. nonne vides etiam quam late parvus aquai prata riget fons inter dum campisque redundet?	Nor is this to be wondered at: how so small a sun can send out so much light as to fill seas and all lands and sky, watering them, and drench all things with warm heat. [as large as it really is, so large it must look to us from here on high] For it may be that here a single, wide-open fountain of the whole world's light, pouring freely, gushes and bursts forth, because the elements of heat from all the world gather from every side in such a way, and their mass so flows together, that this blaze streams out from a single source. Don't you see, too, how widely a small spring of water sometimes waters the meadows and floods the fields?
	/ est etiam quoque uti non magno solis ab igni aëra percipiat calidis fervoribus ardor, opportunus ita est si forte et idoneus aër, ut queat accendi parvis ardoribus ictus; quod genus inter dum segetes stipulamque videmus accidere ex una scintilla incendia passim. forsitan et rosea sol alte lampade lucens possideat multum caecis fervoribus ignem circum se, nullo qui sit fulgore notatus, aestifer ut tantum radiorum exaugeat ictum.	/ It is also possible that from the sun's fire, though not great, a blaze may seize the air with scorching heat, if the air happens to be suitable and ready enough to be set alight when struck by small flames; just as we sometimes see crops and stubble catch fire everywhere from a single spark. Perhaps, too, the sun, shining on high with its rosy lamp, has around it a great deal of fire with unseen heat, fire marked by no brightness, so that, heat-bearing, it greatly increases the force of its rays.
5.614	Nec ratio solis simplex [et] recta patescit, quo pacto aestivis e partibus aegocerotis brumalis adeat flexus atque inde revertens canceris ut vertat metas ad solstitialis, lunaque mensibus id spatium videatur obire, annua sol in quo consumit tempora cursu.	Nor is there a simple and straightforward account of the sun: how, from its summer regions, it approaches Capricorn's wintry turning, and then, coming back from there,

LATIN	ENGLISH
non, inquam, simplex his rebus reddita causast. nam fieri vel cum primis id posse videtur, Democriti quod sancta viri sententia ponit, quanto quaeque magis sint terram sidera propter, tanto posse minus cum caeli turbine ferri; evanescere enim rapidas illius et acris imminui supter viris, ideoque relinqui paulatim solem cum posterioribus signis, inferior multo quod sit quam fervida signa.	turns at the solstice goalposts of Cancer; and how the moon is seen to cover in a month the stretch on which the sun spends a year's time in its course. No single cause, I say, is given for these things. For first and foremost it seems it can happen as the venerable doctrine of Democritus lays down: the nearer each star is to the earth, the less it can be carried along with the sky's whirl; for its swift and fierce force fades and weakens below, and so the sun is left gradually behind with the rear constellations, because it is far lower than the blazing constellations.
/ et magis hoc lunam: quanto demissior eius cursus abest procul a caelo terrisque propinquat, tanto posse minus cum signis tendere cursum. flaccidiore etiam quanto iam turbine fertur inferior quam sol, tanto magis omnia signa hanc adipiscuntur circum praeterque feruntur. propterea fit ut haec ad signum quodque reverti mobilius videatur, ad hanc quia signa revisunt. fit quoque ut e mundi transversis partibus aër alternis certo fluere alter tempore possit, qui queat aestivis solem detrudere signis brumalis usque ad flexus gelidumque rigorem, et qui reiciat gelidis a frigoris umbris aestiferas usque in partis et fervida signa.	/ And the moon more so: the lower her course runs, far from the sky and close to the earth, the less she can keep pace with the constellations. And the slacker the whirl that carries her, being lower than the sun, the more all the constellations overtake her and are carried round and past her. So it happens that she seems to return to each constellation more quickly, because the constellations come back round to her. It may also be that from the world's opposite quarters an air can flow, each in turn, at a fixed time, one able to thrust the sun from the summer constellations all the way to its wintry turning and the icy cold, and one to fling it back from the chill shadows of cold to the heat-bearing regions and the blazing constellations.
/ et ratione pari lunam stellasque putandumst, quae volvunt magnos in magnis orbibus annos, aëribus posse alternis e partibus ire. nonne vides etiam diversis nubila ventis diversas ire in partis inferna supernis? qui minus illa queant per magnos aetheris orbis aestibus inter se diversis sidera ferri?	/ And in the same way we must suppose that the moon and the stars, which roll through great years in great orbits, can move by airs from alternate quarters. Don't you see, too, how clouds, driven by opposing winds, move in opposite directions, the lower ones against the upper? Why should those stars be less able, through the ether's great orbits,

	LATIN	ENGLISH
		to be carried by currents running against each other?
5.650	At nox obruit ingenti caligine terras, aut ubi de longo cursu sol ultima caeli impulit atque suos efflavit languidus ignis concussos itere et labefactos aëre multo, aut quia sub terras cursum convortere cogit vis eadem, supra quae terras pertulit orbem.	But night covers the earth in vast darkness either when, after its long course, the sun has struck the farthest parts of the sky and, weary, breathed out its fires, shaken by the journey and weakened by much air, or because it is compelled to turn its course beneath the earth by the same force that carried its sphere above the earth.
5.656	Tempore item certo roseam Matuta per oras aetheris auroram differt et lumina pandit, aut quia sol idem, sub terras ille revertens, anticipat caelum radiis accendere temptans, aut quia conveniunt ignes et semina multa confluere ardoris consuerunt tempore certo, quae faciunt solis nova semper lumina gigni; quod genus Idaeis fama est e montibus altis dispersos ignis orienti lumine cerni, inde coire globum quasi in unum et conficere orbem. nec tamen illud in his rebus mirabile debet esse, quod haec ignis tam certo tempore possint semina confluere et solis reparare nitorem. multa videmus enim, certo quae tempore fiunt omnibus in rebus. florescunt tempore certo arbusta et certo dimittunt tempore florem.	Likewise at a fixed time Matuta spreads rosy dawn along the shores of the ether and opens out the light, either because the same sun, returning beneath the earth, seizes the sky ahead of time, trying to kindle it with its rays, or because fires gather, and many seeds of heat are accustomed to flow together at a fixed time, which cause the sun's light to be born ever new; just as, they say, from the high mountains of Ida scattered fires are seen at the rising of the light, which then come together as if into a single globe and form a sphere. Nor in these matters should it seem a wonder that these seeds of fire can flow together at so fixed a time and restore the sun's brightness. For we see many things that happen at a fixed time in all things. At a fixed time the trees flower, and at a fixed time they shed their flowers.[5]
	/ nec minus in certo dentes cadere imperat aetas tempore et inpubem molli pubescere veste et pariter mollem malis demittere barbam. fulmina postremo nix imbres nubila venti non nimis incertis fiunt in partibus anni. namque ubi sic fuerunt causarum exordia prima atque ita res mundi cecidere ab origine prima, conseque quoque iam redeunt ex ordine certo.	/ No less does age command the teeth to fall out at a fixed time, and the beardless youth to reach manhood in a soft covering and let a soft beard grow down both cheeks alike. Lastly, thunderbolts, snow, rains, clouds, winds come at seasons of the year that are not very uncertain. For since the very first origins of the causes were such, and things fell out so from the world's first origin, they now come round in sequence in a fixed order.

5 Mater Matuta was an old Roman goddess of the dawn. Ida is the mountain range near Troy, from whose summit the rising sun was said to be seen gathering from scattered fires.

	LATIN	ENGLISH
5.680	Crescere itemque dies licet et tabescere noctes, et minui luces, cum sumant augmina noctis, aut quia sol idem sub terras atque superne imparibus currens amfractibus aetheris oras partit et in partis non aequas dividit orbem, et quod ab alterutra detraxit parte, reponit eius in adversa tanto plus parte relatus, donec ad id signum caeli pervenit, ubi anni nodus nocturnas exaequat lucibus umbras; nam medio cursu flatus aquilonis et austri distinet aequato caelum discrimine metas propter signiferi posituram totius orbis, annua sol in quo concludit tempora serpens, obliquo terras et caelum lumine lustrans, ut ratio declarat eorum qui loca caeli omnia dispositis signis ornata notarunt.	Likewise, days can lengthen and nights waste away, and daylight shrink when nights take on increase, either because the same sun, running beneath the earth and above in unequal arcs, parts the regions of the ether and divides its orbit into unequal parts, and what it has taken from one part, it restores, carried round, by just so much more in the opposite part, until it reaches that sign of the sky where the year's node makes the shadows of night equal to the daylight; for, midway in its course between the blasts of the north wind and the south, the sky holds its turning points apart at an equal distance because of the position of the whole zodiac's circle, in which the sun, winding along, completes the year's span, lighting earth and sky with slanting light, as the reasoning of those makes plain who have mapped all the regions of the sky, adorned with their constellations set in order.
	/ aut quia crassior est certis in partibus aër, sub terris ideo tremulum iubar haesitat ignis nec penetrare potest facile atque emergere ad ortus; propterea noctes hiberno tempore longae cessant, dum veniat radiatum insigne diei. aut etiam, quia sic alternis partibus anni tardius et citius consuerunt confluere ignes, qui faciunt solem certa de surgere parte, propterea fit uti videantur dicere verum.	/ Or because the air is thicker in certain parts, and so the fire's quivering radiance lingers beneath the earth and cannot easily pass through and emerge at its rising; that is why in wintertime the long nights linger, until the rayed emblem of day arrives. Or else, because at alternating seasons of the year the fires are accustomed to flow together more slowly and more quickly, the fires that make the sun rise at a fixed spot, it follows that they seem to speak the truth.
5.705	Luna potest solis radiis percussa nitere inque dies magis [id] lumen convertere nobis ad speciem, quantum solis secedit ab orbi, donique eum contra pleno bene lumine fulsit atque oriens obitus eius super edita vidit; inde minutatim retro quasi condere lumen debet item, quanto propius iam solis ad ignem labitur ex alia signorum parte per orbem; ut faciunt, lunam qui fingunt esse pilai	The moon may shine because it is struck by the sun's rays, and day by day turn more of that light toward us, into view, the farther it moves away from the sun's sphere, until, opposite the sun, it has shone with a full light and, rising high, has watched it set; then little by little it must likewise hide its light

LATIN	ENGLISH
consimilem cursusque viam sub sole tenere. est etiam quare proprio cum lumine possit volvier et varias splendoris reddere formas; corpus enim licet esse aliud, quod fertur et una labitur omnimodis occursans officiensque, nec potis est cerni, quia cassum lumine fertur.	backward, as it were, the nearer it now glides to the sun's fire from the other side through the circle of the constellations; as those suppose who picture the moon as like a ball, and hold that its course runs below the sun. There is also reason why it might roll along with a light of its own and still show varying shapes of brightness; for there may be another body, carried and gliding along with it, getting in its way and blocking it in every manner, which cannot be seen because it moves bereft of light.
/ versarique potest, globus ut, si forte, pilai dimidia ex parti candenti lumine tinctus, versandoque globum variantis edere formas, donique eam partem, quae cumque est ignibus aucta, ad speciem vertit nobis oculosque patentis; inde minutatim retro contorquet et aufert luciferam partem glomeraminis atque pilai; ut Babylonica Chaldaeum doctrina refutans astrologorum artem contra convincere tendit, proinde quasi id fieri nequeat quod pugnat uterque aut minus hoc illo sit cur amplectier ausis. denique cur nequeat semper nova luna creari ordine formarum certo certisque figuris inque dies privos aborisci quaeque creata atque alia illius reparari in parte locoque, difficilest ratione docere et vincere verbis, ordine cum [videas] tam certo multa creari.	/ Or it may turn, like a ball's sphere, perhaps, tinged on one half with gleaming light, and by turning the sphere show changing shapes, until it turns whatever part is endowed with fire into view, toward us and our open eyes; then little by little it twists back and takes away the light-bearing part of its globe, its ball; as the Babylonian teaching of the Chaldaeans, refuting the astronomers' art, strives to prove the opposite — as if what each side fights for could not be so, or there were less reason for you to dare embrace this than that. Lastly, why a new moon could not be created each time with a fixed order of shapes and fixed figures, and each one created perish every single day, and another be restored in its part and place, is hard to show by reasoning or to establish in argument, since you see so many things created in so fixed an order.[6]
/ it Ver et Venus et Veneris praenuntius ante pennatus graditur, Zephyri vestigia propter Flora quibus mater praespargens ante viai cuncta coloribus egregiis et odoribus opplet. inde loci sequitur Calor aridus et comes una pulverulenta Ceres [et] etesia flabra aquilonum. inde Autumnus adit, graditur simul Euhius Euan. inde aliae tempestates ventique secuntur, altitonans Volturnus et Auster fulmine pollens.	/ Spring comes, and Venus, and before them strides Venus's winged herald; and close on the footprints of Zephyr mother Flora strews the whole way before them and fills it all with glorious colors and scents. Next in place follows parching Heat, and with it as companion

6 The Chaldaeans were the astronomer-priests of Babylon; their half-lit, rotating moon is set against the Greek astronomers' view that it borrows its light from the sun.

	LATIN	ENGLISH
	tandem Bruma nives adfert pigrumque rigorem reddit. Hiemps sequitur crepitans hanc dentibus algu. quo minus est mirum, si certo tempore luna gignitur et certo deletur tempore rusus, cum fieri possint tam certo tempore multa.	dusty Ceres and the Etesian blasts of the north winds. Next comes Autumn, and with him steps Euhius Euan. Then other seasons follow, and other winds, high-thundering Volturnus and the South Wind, mighty with lightning. At last Midwinter brings the snows and brings back numbing cold. Winter follows her, teeth chattering with chill. So it is less surprising if at a fixed time the moon is born and at a fixed time is blotted out again, since so many things can happen at so fixed a time.[7]
5.751	Solis item quoque defectus lunaeque latebras pluribus e causis fieri tibi posse putandumst. nam cur luna queat terram secludere solis lumine et a terris altum caput obstruere ei, obiciens caecum radiis ardentibus orbem, tempore eodem aliut facere id non posse putetur corpus, quod cassum labatur lumine semper? solque suos etiam dimittere languidus ignis tempore cur certo nequeat recreareque lumen, cum loca praeteriit flammis infesta per auras, quae faciunt ignis interstingui atque perire?	Likewise you must suppose that eclipses of the sun and the moon's hidings can happen from several causes. For why should the moon be able to shut the earth off from the sun's light and block its high head from the earth, setting its dark sphere in the way of the burning rays, and yet at the same time another body not be thought able to do this, one that glides along always bereft of light? And why could the sun not also, growing faint, let its fires fail at a fixed time and renew its light, once it has passed through places in the air hostile to its flames, which make its fires be quenched and perish?
	/ et cur terra queat lunam spoliare vicissim lumine et oppressum solem super ipsa tenere, menstrua dum rigidas coni perlabitur umbras, tempore eodem aliud nequeat succurrere lunae corpus vel supra solis perlabier orbem, quod radios inter rumpat lumenque profusum? et tamen ipsa suo si fulget luna nitore, cur nequeat certa mundi languescere parte, dum loca luminibus propriis inimica per exit? [menstrua dum rigidas coni perlabitur umbras].	/ And why should the earth be able in turn to rob the moon of light and, itself above, hold the sun suppressed, while the moon glides each month through the cone's rigid shadows, and yet at the same time another body not be able to pass under the moon, or glide above the sun's sphere, breaking off its rays and the light it pours out? And yet, if the moon shines with a brilliance of its own, why could it not grow faint in a certain part of the world,

7 Venus's winged herald is Cupid; Zephyr is the west wind of spring and Flora the goddess of flowers. The Etesian ("yearly") winds blow steadily from the north over the eastern Mediterranean in summer. Euhius Euan is a ritual name of Bacchus, god of the vintage, and Volturnus a southeast wind.

	LATIN	ENGLISH
		while it passes through places hostile to its own light? [while the moon glides each month through the cone's rigid shadows].

THE ORIGIN OF LIFE

The young earth brings forth plants, animals and humans; monsters fail and defenseless kinds die out.

	LATIN	ENGLISH
5.772	Quod superest, quoniam magni per caerula mundi qua fieri quicquid posset ratione resolvi, solis uti varios cursus lunaeque meatus noscere possemus quae vis et causa cieret, quove modo [possent] offecto lumine obire et neque opinantis tenebris obducere terras, cum quasi conivent et aperto lumine rursum omnia convisunt clara loca candida luce, nunc redeo ad mundi novitatem et mollia terrae arva, novo fetu quid primum in luminis oras tollere et incertis crerint committere ventis.	For the rest, since I have explained by what means everything could happen throughout the blue expanses of the great world, so that we could know what force and cause drive the sun's varied courses and the moon's journeys, and how, their light blocked, they could vanish and cover the unsuspecting earth in darkness, when they, as it were, shut their eyes and then, with light reopened, look out again on all places bright with shining radiance— now I return to the world's infancy and the soft fields of earth, to what, with new offspring, they first resolved to raise into the shores of light and entrust to the uncertain winds.
5.783	Principio genus herbarum viridemque nitorem terra dedit circum collis camposque per omnis, florida fulserunt viridanti prata colore, arboribusque datumst variis exinde per auras crescendi magnum inmissis certamen habenis. ut pluma atque pili primum saetaeque creantur quadripedum membris et corpore pennipotentum, sic nova tum tellus herbas virgultaque primum sustulit, inde loci mortalia saecla creavit multa modis multis varia ratione coorta. nam neque de caelo cecidisse animalia possunt, nec terrestria de salsis exisse lacunis. linquitur ut merito maternum nomen adepta terra sit, e terra quoniam sunt cuncta creata.	First, the earth brought forth the kinds of grasses and their green sheen around the hills and over all the plains; flowering meadows gleamed with verdant color; and then to the various trees was given a great contest of growing up into the air, with reins let loose. Just as feathers and hair and bristles are first created on the limbs of four-footed beasts and the bodies of the strong-winged, so the new earth then first put forth grasses and shrubs, and next created the mortal generations, many, arising in many ways by varied means. For living creatures cannot have fallen from the sky, nor can land creatures have come out of salt pools. It remains that the earth has rightly won the name of mother, since from the earth all things were created.
	/ multaque nunc etiam existunt animalia terris imbribus et calido solis concreta vapore;	/ And even now many creatures come forth from the earth,

	LATIN	ENGLISH
	quo minus est mirum, si tum sunt plura coorta et maiora, nova tellure atque aethere adulta. principio genus alituum variaeque volucres ova relinquebant exclusae tempore verno, folliculos ut nunc teretis aestate cicadae lincunt sponte sua victum vitamque petentes. tum tibi terra dedit primum mortalia saecla. multus enim calor atque umor superabat in arvis.	formed by rains and the sun's warm heat; so it is less surprising if more arose then, and larger ones, grown up when earth and ether were new. First, the race of birds and the various winged creatures hatched and left their eggs in springtime, as now in summer cicadas leave their smooth husks of their own accord, seeking food and life. Then, you must know, the earth first gave forth the mortal generations. For there was an abundance of heat and moisture in the fields.
	/ hoc ubi quaeque loci regio opportuna dabatur, crescebant uteri terram radicibus apti; quos ubi tempore maturo pate fecerat aetas infantum, fugiens umorem aurasque petessens, convertebat ibi natura foramina terrae et sucum venis cogebat fundere apertis consimilem lactis, sicut nunc femina quaeque cum peperit, dulci repletur lacte, quod omnis impetus in mammas convertitur ille alimenti. terra cibum pueris, vestem vapor, herba cubile praebebat multa et molli lanugine abundans. at novitas mundi nec frigora dura ciebat nec nimios aestus nec magnis viribus auras. omnia enim pariter crescunt et robora sumunt.	/ So wherever a suitable spot was found, wombs grew, attached to the earth by roots; and when in due time the infants' age had opened them, fleeing the moisture and seeking the air, nature turned the earth's pores toward them there and made it pour from its opened veins a juice like milk, just as now every woman, when she has given birth, is filled with sweet milk, because all that surge of nourishment is turned toward the breasts. The earth gave the children food, the warmth gave clothing, the grass a bed abounding in plenty of soft down. But the world's newness brought on neither harsh cold nor excessive heat nor winds of great force. For all things grow and gain strength together.
5.821	Quare etiam atque etiam maternum nomen adepta terra tenet merito, quoniam genus ipsa creavit humanum atque animal prope certo tempore fudit omne quod in magnis bacchatur montibus passim, aëriasque simul volucres variantibus formis. 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 [suc]crescit et [e] contemptibus exit. sic igitur mundi naturam totius aetas mutat, et ex alio terram status excipit alter, quod potuit nequeat, possit quod non tulit ante.	So again and again the earth has won and rightly holds the name of mother, since she herself created the human race, and at about a fixed time poured forth every animal that runs wild everywhere on the great mountains, and with them the birds of the air in their varied forms. But since she must have some limit to bearing, she stopped, like a woman worn out by long age. For time changes the nature of the whole world, and one state must follow another in all things, and nothing stays like itself: all things move on, nature transforms all things and compels them to change.

	LATIN	ENGLISH
		For one thing rots and languishes, feeble with age, and then another grows up and comes forth from contempt. So, then, time changes the nature of the whole world, and one state of the earth gives way to another, so that it cannot bear what it could, and can bear what it did not before.
5.837	Multaque tum tellus etiam portenta creare conatast mira facie membrisque coorta, androgynem, interutras necutrumque utrimque remotum, orba pedum partim, manuum viduata vicissim, muta sine ore etiam, sine voltu caeca reperta, vinctaque membrorum per totum corpus adhaesu, nec facere ut possent quicquam nec cedere quoquam nec vitare malum nec sumere quod volet usus. cetera de genere hoc monstra ac portenta creabat, ne quiquam, quoniam natura absterruit auctum nec potuere cupitum aetatis tangere florem nec reperire cibum nec iungi per Veneris res.	At that time the earth also tried to create many monsters, arising with strange faces and limbs: the androgyne, between the two sexes, neither one, apart from both; some deprived of feet, others in turn bereft of hands, some found mute without a mouth, or blind without a face, or bound fast by their limbs clinging together all over the body, so that they could do nothing and go nowhere, neither avoid harm nor take what need required. Other monsters and prodigies of this kind she created, in vain, since nature barred their growth, and they could not reach the longed-for flower of youth, nor find food, nor be joined in the acts of Venus.
	/ multa videmus enim rebus concurrere debere, ut propagando possint procudere saecla; pabula primum ut sint, genitalia deinde per artus semina qua possint membris manare remissis, feminaque ut maribus coniungi possit, habere, mutua qui mutent inter se gaudia uterque.	/ For we see that many things must come together for creatures to be able to forge on their generations by breeding: first, there must be fodder; then a way by which the creative seeds can flow through the frame from the relaxed limbs; and, for the female to be joined with the male, both must have the means to exchange mutual joys with each other.
5.855	Multaque tum interiisse animantum saecla necessest nec potuisse propagando procudere prolem. nam quae cumque vides vesci vitalibus auris, aut dolus aut virtus aut denique mobilitas est ex ineunte aevo genus id tuta⟨TA⟩ reservans. multaque sunt, nobis ex utilitate sua quae commendata manent, tutelae tradita nostrae. principio genus acre leonum saevaque saecla tutatast virtus, volpes dolus et fuga cervos. at levisomna canum fido cum pectore corda,	Many races of living things must then have perished and been unable to forge on their offspring by breeding. For whatever creatures you see feeding on the breath of life, it is either cunning or courage or, lastly, speed that has kept that kind safe from the beginning of time. And there are many that, commended to us by

	LATIN	ENGLISH
	et genus omne quod est veterino semine partum lanigeraeque simul pecudes et bucera saecla omnia sunt hominum tutelae tradita, Memmi; nam cupide fugere feras pacemque secuta sunt et larga suo sine pabula parta labore, quae damus utilitatis eorum praemia causa.	their usefulness, survive, entrusted to our protection. First, the fierce race of lions and savage breeds courage has protected, cunning the foxes, and flight the deer. But the light-sleeping minds of dogs, with their loyal hearts, and every kind born of the seed of beasts of burden, and with them the wool-bearing flocks and the horned herds, have all been entrusted to human protection, Memmius; for they eagerly fled wild beasts and sought peace and plentiful fodder won without their own labor, which we give as a reward for their usefulness.
	/ at quis nil horum tribuit natura, nec ipsa sponte sua possent ut vivere nec dare nobis utilitatem aliquam, quare pateremur eorum praesidio nostro pasci genus esseque tutum, scilicet haec aliis praedae lucroque iacebant indupedita suis fatalibus omnia vinclis, donec ad interitum genus id natura redegit.	/ But those to whom nature gave none of these gifts, so that they could neither live on their own by themselves nor render us any service, for which we might allow their kind to feed and be safe under our protection— these, of course, lay open as prey and profit to others, all hampered by their own fateful chains, until nature brought that kind to extinction.
5.878	Sed neque Centauri fuerunt nec tempore in ullo esse queunt duplici natura et corpore bino ex alienigenis membris compacta, potestas hinc illinc partis ut sat par esse potissit. id licet hinc quamvis hebeti cognoscere corde. principio circum tribus actis impiger annis floret equus, puer haut quaquam; nam saepe etiam nunc ubera mammarum in somnis lactantia quaeret.	But there never were Centaurs, nor at any time can there be creatures of twofold nature and double body put together from limbs of alien kinds, such that the powers of the parts on this side and that could be fairly matched. And this anyone, however dull his wits, can grasp from what follows. First, when some three years have run their course, a horse is in the vigor of its prime, a boy by no means; for often even then he will still seek in his sleep the milk-giving breasts.
	/ post ubi equum validae vires aetate senecta membraque deficiunt fugienti languida vita, tum demum puerili aevo florenta iuventas officit et molli vestit lanugine malas; ne forte ex homine et veterino semine equorum confieri credas Centauros posse neque esse, aut rapidis canibus succinctas semimarinis corporibus Scyllas et cetera de genere horum, inter se quorum discordia membra videmus;	/ Later, when the horse's stout strength in old age and its limbs are failing, drooping as life ebbs away, then at last, as boyhood ends, the flower of youth arrives for the boy and clothes his cheeks with soft down; so you must not believe that from man and the draught-beast seed of horses

LATIN	ENGLISH
quae neque florescunt pariter nec robora sumunt corporibus neque proiciunt aetate senecta nec simili Venere ardescunt nec moribus unis conveniunt neque sunt eadem iucunda per artus. quippe videre licet pinguescere saepe cicuta barbigeras pecudes, homini quae est acre venenum.	Centaurs can be formed, or can exist, or Scyllas, girdled with ravening dogs, their bodies half of the sea, and all the rest of that kind, whose limbs we see are at odds with one another; for these neither flower together nor gain their strength of body at once, nor lose it in old age, nor burn with a like Venus, nor agree in one set of habits, nor do the same things please their frames. Indeed you can see bearded goats often grow fat on hemlock, which for a man is a bitter poison.[8]
/ flamma quidem [vero] cum corpora fulva leonum tam soleat torrere atque urere quam genus omne visceris in terris quod cumque et sanguinis extet, qui fieri potuit, triplici cum corpore ut una, prima leo, postrema draco, media ipsa, Chimaera ore foras acrem flaret de corpore flammam? quare etiam tellure nova caeloque recenti talia qui fingit potuisse animalia gigni, nixus in hoc uno novitatis nomine inani, multa licet simili ratione effutiat ore, aurea tum dicat per terras flumina vulgo fluxisse et gemmis florere arbusta suësse aut hominem tanto membrorum esse impete natum, trans maria alta pedum nisus ut ponere posset et manibus totum circum se vertere caelum.	/ Again, since flame indeed scorches and burns the tawny bodies of lions just as it does every kind of flesh and blood that exists on earth, how could it happen that one creature with three bodies— lion in front, serpent behind, in the middle the goat herself, the Chimaera— should breathe fierce flame out of her body through her mouth? So anyone who imagines that, when the earth was new and the sky fresh, such animals could have been born, leaning on this one empty word, “newness,” may babble many things by the same reasoning: he may say that rivers of gold then flowed everywhere across the land, and trees used to blossom with gems, or that a man was born with such a mighty reach of limb that he could plant his footsteps across the deep seas and with his hands whirl the whole sky round about him.[9]
/ nam quod multa fuere in terris semina rerum, tempore quo primum tellus animalia fudit, nil tamen est signi mixtas potuisse creari inter se pecudes compactaque membra animantum, propterea quia quae de terris nunc quoque abundant herbarum genera ac fruges arbustaque laeta non tamen inter se possunt complexa creari, sed res quaeque suo ritu procedit et omnes foedere naturae certo discrimina servant.	/ For though there were many seeds of things in the earth at the time when the earth first poured out living creatures, still that is no sign that beasts could have been created mixed together, or the limbs of creatures joined in one,

8 Scylla, in Homer’s *Odyssey*, is a sea-monster with dogs about her waist who snatches sailors from passing ships.
9 The Chimaera’s name means “she-goat” in Greek, hence the goat that is “herself” in the middle.

	LATIN	ENGLISH
		because the kinds of grasses and grain and flourishing trees that even now spring up abundantly from the earth still cannot be created intertwined with one another; each thing goes forward in its own way, and all keep their distinctions by a fixed law of nature.

THE FIRST HUMANS

The earliest people live like wild beasts, without fire, clothing, customs or laws.

	LATIN	ENGLISH
5.925	Et genus humanum multo fuit illud in arvis durius, ut decuit, tellus quod dura creasset, et maioribus et solidis magis ossibus intus fundatum, validis aptum per viscera nervis, nec facile ex aestu nec frigore quod caperetur nec novitate cibi nec labi corporis ulla. multaque per caelum solis volventia lustra volgivago vitam tractabant more ferarum. nec robustus erat curvi moderator aratri quisquam, nec scibat ferro molirier arva nec nova defodere in terram virgulta neque altis arboribus veteres decidere falcibus ramos. quod sol atque imbres dederant, quod terra crearat sponte sua, satis id placabat pectora donum.	And the human race that lived then in the fields was far hardier, as was fitting, since the hard earth had made it; it was built within on larger and more solid bones, knit together through its flesh with strong sinews, not easily overcome by heat or cold, by strange food, or by any flaw of the body. Through many cycles of the sun rolling across the sky they led their lives in the roaming way of wild beasts. No one was a sturdy guide of the curved plow, no one knew how to work the fields with iron, or bury young shoots in the ground, or from tall trees cut the old branches with pruning hooks. What the sun and rains had given, what the earth had produced of her own accord—that gift was enough to content their hearts.
	/ glandiferas inter curabant corpora quercus plerumque; et quae nunc hiberno tempore cernis arbita puniceo fieri matura colore, plurima tum tellus etiam maiora ferebat. multaque praeterea novitas tum florida mundi pabula dura tulit, miseris mortalibus ampla. at sedare sitim fluvii fontesque vocabant, ut nunc montibus e magnis decursus aquai claricitat late sitientia saecla ferarum. denique nota vagis silvestria templa tenebant nympharum, quibus e scibant umore fluenta lubrica proluvie larga lavere umida saxa, umida saxa, super viridi stillantia musco, et partim plano scatere atque erumpere campo.	/ Among the acorn-bearing oaks they looked after their bodies for the most part; and the arbutus berries you now see ripening in winter time, turning scarlet, the earth then bore in great numbers, and larger too. Besides, the flowering newness of the world then brought forth much rough fodder, ample for wretched mortals. But rivers and springs called them to quench their thirst, as now the rush of water down from great mountains calls loud and far to the thirsty tribes of wild beasts.

LATIN	ENGLISH
	Lastly, as they wandered, they took to the woodland shrines of the nymphs, now known to them, from which they knew that gliding streams of water washed with lavish flood the wet rocks, the wet rocks, dripping over the green moss, and in places gushed and burst out over the level plain.
/ necdum res igni scibant tractare neque uti pellibus et spoliis corpus vestire ferarum, sed nemora atque cavos montis silvasque colebant et frutices inter condebant squalida membra verbera ventorum vitare imbrisque coacti. nec commune bonum poterant spectare neque ullis moribus inter se scibant nec legibus uti. quod cuique obtulerat praedae fortuna, ferebat sponte sua sibi quisque valere et vivere doctus. et Venus in silvis iungebat corpora amantum; conciliabat enim vel mutua quamque cupido vel violenta viri vis atque inpensa libido vel pretium, glandes atque arbita vel pira lecta. et manuum mira freti virtute pedumque consectabantur silvestria saecla ferarum missilibus saxis et magno pondere clavae.	/ Not yet did they know how to work things with fire, or to use skins, clothing their bodies in the spoils of wild beasts; they dwelt in groves and mountain caves and forests, and hid their rough limbs among the brushwood, driven to escape the lashing of winds and rains. They could not look to the common good, nor did they know how to use any customs or laws among themselves. Whatever booty chance had offered each, he carried off on his own, schooled to thrive and live for himself. And Venus joined the bodies of lovers in the woods; for each woman was won over either by mutual desire, or by the man's violent force and headstrong lust, or by a price—acorns and arbutus berries, or choice pears. And relying on the wondrous strength of their hands and feet they hunted the woodland tribes of wild beasts with hurled stones and the great weight of the club.
/ multaque vincebant, vitabant pauca latebris; saetigerisque pares subus silvestria membra nuda dabant terrae nocturno tempore capti, circum se foliis ac frondibus involventes. nec plangore diem magno solemque per agros quaerebant pavidi palantes noctis in umbris, sed taciti respectabant somnoque sepulti, dum rosea face sol inferret lumina caelo. a parvis quod enim consuerant cernere semper alterno tenebras et lucem tempore gigni, non erat ut fieri posset mirarier umquam nec diffidere, ne terras aeterna teneret nox in perpetuum detracto lumine solis.	/ Many they overcame; a few they avoided by hiding; and like bristly boars they laid their woodland limbs naked on the ground, when night overtook them, wrapping themselves around with leaves and foliage. Nor did they, with loud wailing, seek the day and the sun across the fields, wandering in terror through the shadows of night, but waited, silent and buried in sleep, until the sun with rosy torch brought light into the sky.

	LATIN	ENGLISH
	sed magis illud erat curae, quod saecla ferarum infestam miseris faciebant saepe quietem.	For since from childhood they had always been used to seeing darkness and light born by turns, it could never happen that they wondered at it, or feared that everlasting night might hold the earth forever, the light of the sun withdrawn. What troubled them more was that the tribes of wild beasts often made rest perilous for the poor wretches.
	/ eiectique domo fugiebant saxea tecta spumigeri suis adventu validique leonis atque intempesta cedebant nocte paventes hospitibus saevis instrata cubilia fronde.	/ Driven from home, they would flee their rocky shelters at the coming of a foaming boar or a mighty lion, and in the dead of night, in terror, they would yield to savage guests their beds strewn with leaves.
5.988	Nec nimio tum plus quam nunc mortalia saecla dulcia linquebant lamentis lumina vitae. unus enim tum quisque magis deprensus eorum pabula viva feris praebebat, dentibus haustus, et nemora ac montis gemitu silvasque replebat viva videns vivo sepeliri viscera busto. at quos effugium servarat corpore adeso, posterius tremulas super ulcera tetra tenentes palmas horriferis accibant vocibus Orcum, donique eos vita privarant vermina saeva expertis opis, ignaros quid volnera vellent. at non multa virum sub signis milia ducta una dies dabat exitio nec turbida ponti aequora lidebant navis ad saxa virosque.	Nor then did mortal tribes, much more than now, leave the sweet light of life with lamentation. For then it was more often that one of them, caught alone, would offer living food to the beasts, gulped down by their teeth, and fill the groves and mountains and forests with groans, seeing his living flesh buried in a living tomb. And those whom flight had saved with their bodies half-eaten would afterwards, holding trembling hands over their foul sores, call on Orcus with hideous cries, until cruel gripings robbed them of life, helpless, not knowing what their wounds required. But no single day then sent many thousands of men led beneath the standards to their death, nor did the stormy waters of the sea dash ships and men upon the rocks.
	/ nam temere in cassum frustra mare saepe coortum saevibat leviterque minas ponebat inanis, nec poterat quemquam placidi pellacia ponti subdola pellicere in fraudem ridentibus undis. improba navigii ratio tum caeca iacebat. tum penuria deinde cibi languentia leto membra dabat, contra nunc rerum copia mersat. illi inprudentes ipsi sibi saepe venenum vergebant, nunc dant [aliis] sollertius ipsi.	/ For the sea, often rising up at random, raged idly, to no purpose, and lightly laid aside its empty threats; nor could the treacherous allure of the calm sea lure anyone into ruin with its smiling waves. The reckless art of sailing lay then unknown. Then, too, lack of food gave fainting limbs to death; now, by contrast, it is abundance that drowns them.

	LATIN	ENGLISH
		They, unwitting, often poured out poison for themselves; now, more skillfully, men give it to others.

THE BEGINNINGS OF SOCIETY

Huts, families, fire, friendship and language soften human life.

	LATIN	ENGLISH
5.1011	Inde casas postquam ac pellis ignemque pararunt et mulier coniuncta viro concessit in unum ... cognita sunt, prolemque ex se videre creatam, tum genus humanum primum mollescere coepit. ignis enim curavit, ut alsia corpora frigus non ita iam possent caeli sub tegmine ferre, et Venus inminuit viris puerique parentum blanditiis facile ingenium fregere superbum. tunc et amicitiem coeperunt iungere aventes finitimi inter se nec laedere nec violari, et pueros commendarunt muliebreque saeclum, vocibus et gestu cum balbe significarent imbecillorum esse aequum misererier omnis.	Then, after they got themselves huts and skins and fire, and woman, joined to man, withdrew with him into one place, ... were known, and they saw offspring born from themselves, then first the human race began to soften. For fire saw to it that their shivering bodies could no longer bear the cold so well under the canopy of sky, and Venus sapped their strength, and children, with their coaxing, easily broke the proud spirit of their parents. Then too neighbors began to join in friendship, eager neither to harm nor to be harmed, and commended to one another their children and womenfolk, signifying, stammeringly, with cries and gestures, that it was right for everyone to pity the weak.
	/ nec tamen omnimodis poterat concordia gigni, sed bona magnaque pars servabat foedera caste; aut genus humanum iam tum foret omne peremptum nec potuisset adhuc perducere saecla propago.	/ Yet harmony could not arise in every way, but a good, large part kept their pacts faithfully; or else the human race would have been wiped out entirely even then, and breeding could not have carried its generations down to now.
5.1028	At varios linguae sonitus natura subegit mittere et utilitas expressit nomina rerum, non alia longe ratione atque ipsa videtur protrahere ad gestum pueros infantia linguae, cum facit ut digito quae sint praesentia monstrent. sentit enim vim quisque suam quod possit abuti. cornua nata prius vitulo quam frontibus extent, illis iratus petit atque infestus inurget. at catuli pantherarum scymnique leonum unguibus ac pedibus iam tum morsuque repugnant, vix etiam cum sunt dentes unguesque creati. alituum porro genus alis omne videmus fidere et a pennis tremulum petere auxiliatum. proinde putare aliquem tum nomina distribuisse	But nature drove them to utter the various sounds of the tongue, and need squeezed out the names of things, in much the same way as the very speechlessness of the tongue seems to lead children on to gesture, when it makes them point with a finger at things that are present. For every creature senses what it can use its own powers for. A calf, before its horns have sprouted and stand out from its brow, already butts with them in anger and presses hard

LATIN	ENGLISH
rebus et inde homines didicisse vocabula prima, desiperest.	on the attack. And panther cubs and lion whelps fight back with claws and feet and bites already, when their teeth and claws have barely even formed. Again, we see the whole race of birds trust in their wings and seek a fluttering aid from their feathers. So to think that someone back then handed out names to things, and that from him people learned their first words, is folly.
nam cur hic posset cuncta notare vocibus et varios sonitus emittere linguae, tempore eodem alii facere id non quisse putentur? praeterea si non alii quoque vocibus usi inter se fuerant, unde insita notities est utilitatis et unde data est huic prima potestas, quid vellet facere ut sciret animoque videret? cogere item pluris unus victosque domare non poterat, rerum ut perdiscere nomina vellent. nec ratione docere ulla suadereque surdis, quid sit opus facto, facilest; neque enim paterentur nec ratione ulla sibi ferrent amplius auris vocis inauditos sonitus obtundere frustra. postremo quid in hac mirabile tantoperest re, si genus humanum, cui vox et lingua vigeret, pro vario sensu varia res voce notaret?	For why should he have been able to mark all things with words and utter the various sounds of the tongue, while others at the same time should be thought unable to do it? Besides, if others too had not used words among themselves, where did he get the implanted notion of their use, and where was he first given the power to know what he wanted to do and see it in his mind? Again, one man could not compel many and, having conquered them, tame them into being willing to learn the names of things. Nor is it easy by any means to teach the deaf and persuade them of what needs to be done; for they would not put up with it, nor would they in any way endure any longer the unheard-of sounds of a voice battering their ears in vain. Lastly, what is so very wonderful in this matter, if the human race, strong in voice and tongue, marked things with different sounds for different feelings?
/ cum pecudes mutae, cum denique saecla ferarum dissimilis soleant voces variasque ciere, cum metus aut dolor est et cum iam gaudia gliscunt. quippe [et]enim licet id rebus cognoscere apertis. inritata canum cum primum magna Molossum mollia ricta fremunt duros nudantia dentes, longe alio sonitu rabies [re]stricta minatur, et cum iam latrant et vocibus omnia complent; at catulos blande cum lingua lambere temptant	/ when mute cattle, and even the tribes of wild beasts, are wont to utter unlike and varied cries when there is fear or pain and when joys are swelling? And indeed, you can learn this from plain facts. When the great soft jowls of Molossian hounds, provoked, first begin to snarl, baring their hard teeth,

	LATIN	ENGLISH
	aut ubi eos lactant, pedibus morsuque potentes suspensis teneros imitantur dentibus haustus, longe alio pacto gannitu vocis adulant, et cum deserti baubantur in aedibus, aut cum plorantis fugiunt summisso corpore plagas.	their rage, drawn back, threatens with a sound far different from when they bark outright and fill the whole place with their cries; but when they try to lick their pups fondly with their tongues, or when they dandle them, and, strong as they are in paw and bite, mimic tender gulps with teeth held back, they fawn with a whimpering voice in a far different way from when they howl, left alone in the house, or when, whining, they cower and shrink away from blows.[10]
	/ denique non hinnitus item differre videtur, inter equas ubi equus florenti aetate iuvencus pinnigeri saevit calcaribus ictus Amoris et fremitum patulis sub naribus edit ad arma, et cum sic alias concussis artibus hinnit? postremo genus alituum variaeque volucres, accipitres atque ossifragae mergique marinis fluctibus in salso victum vitamque petentes, longe alias alio iaciunt in tempore voces, et quom de victu certant praedaque repugnant. et partim mutant cum tempestatibus una raucisonos cantus, cornicum ut saecla vetusta corvorumque gregis ubi aquam dicuntur et imbris poscere et inter dum ventos aurasque vocare.	/ Again, does not neighing seem to differ likewise, when a young stallion in the flower of his age rages among the mares, pricked by the spurs of winged Love, and snorts from wide nostrils as if for battle, and when at other times he neighs with trembling limbs? Lastly, the race of birds and the various winged creatures, hawks and ospreys and gulls that in the sea's salt waves seek their food and livelihood, utter cries far different at other times from when they fight for food and struggle over their prey. And some change their harsh-sounding songs along with the weather, as the long-lived tribes of crows and flocks of ravens, when they are said to call for water and rains, and at times to summon winds and breezes.
	/ ergo si varii sensus animalia cogunt, muta tamen cum sint, varias emittere voces, quanto mortalis magis aequumst tum potuisse dissimilis alia atque alia res voce notare!	/ So if different feelings drive animals, mute though they are, to utter different cries, how much more reasonable that mortals then could mark different things with one sound and another!
5.1091	Illud in his rebus tacitus ne forte requiras, fulmen detulit in terram mortalibus ignem primitus, inde omnis flammarum diditur ardor; multa videmus enim caelestibus insita flammis fulgere, cum caeli donavit plaga vaporis. et ramosa tamen cum ventis pulsa vacillans aestuat in ramos incumbens arboris arbor,	In case you silently ask yourself about this matter, it was lightning that first brought fire down to earth for mortals, and from it all the heat of flames is spread abroad; for we see many things, kindled by heavenly flames,

10 Molossian hounds, from Epirus in north-western Greece, were large, powerful dogs prized for hunting and guarding.

	LATIN	ENGLISH
	exprimitur validis extritus viribus ignis, emicat inter dum flammai fervidus ardor, mutua dum inter se rami stirpesque teruntur. quorum utrumque dedisse potest mortalibus ignem. inde cibum quoquere ac flammae mollire vapore sol docuit, quoniam mitescere multa videbant verberibus radiorum atque aestu victa per agros.	blaze up, when a stroke from the sky has endowed them with its heat. And yet, when a branching tree, beaten by the winds and swaying, tosses and leans its boughs against the boughs of another tree, fire is squeezed out, struck forth by the powerful force, and sometimes the fiery heat of flame flashes out, while branches and trunks rub against each other. Either of these may have given fire to mortals. Next, to cook food and soften it in the heat of flame the sun taught them, since they saw many things ripen, subdued by the lashing of its rays and its heat across the fields.

KINGS, WEALTH AND LAW

Kings found cities, gold breeds ambition, kings fall, and laws arise from weariness with violence.

	LATIN	ENGLISH
5.1105	Inque dies magis hi victum vitamque priorem commutare novis monstrabant rebus et igni, ingenio qui praestabant et corde vigebant. condere coeperunt urbis arcemque locare praesidium reges ipsi sibi perfugiumque, et pecudes et agros divisere atque dedere pro facie cuiusque et viribus ingenioque; nam facies multum valuit viresque vigebant. posterius res inventast aurumque repertum, quod facile et validis et pulchris dempsit honorem; divitioris enim sectam plerumque secuntur quam lubet et fortes et pulchro corpore creti. quod siquis vera vitam ratione gubernet, divitiae grandes homini sunt vivere parce aequo animo; neque enim est umquam penuria parvi.	And day by day, more and more, men showed others how to change their former diet and life for new ways and for fire — men who excelled in talent and were strong in mind. Kings began to found cities and to set up a citadel as a stronghold and refuge for themselves, and they divided flocks and fields and gave them out according to each man's looks and strength and talent; for looks counted for much, and strength was in force. Later, property was invented and gold discovered, which easily robbed both the strong and the handsome of their honor; for, as a rule, men follow the party of the richer, however strong or handsome in body they are born. But if one were to steer life by true reasoning, great riches for a man are to live sparingly with a calm mind; for there is never any lack of a little.
	/ at claros homines voluerunt se atque potentes, ut fundamento stabili fortuna maneret et placidam possent opulenti degere vitam, ne quiquam, quoniam ad summum succedere honorem	/ But men wanted to be famous and powerful, so that their fortune might rest on a stable foundation and they, being rich, might lead a peaceful life—

	LATIN	ENGLISH
	certantes iter infestum fecere viai, et tamen e summo, quasi fulmen, deicit ictos invidia inter dum contemptim in Tartara taetra; invidia quoniam ceu fulmine summa vaporant plerumque et quae sunt aliis magis edita cumque; ut satius multo iam sit parere quietum quam regere imperio res velle et regna tenere.	in vain, since in striving to climb to the highest honor they made the road a perilous one to travel, and even so, from the summit, like a thunderbolt, envy at times strikes them and hurls them scornfully down into foul Tartarus; since by envy, as by lightning, the highest places are scorched, as a rule, and whatever stands raised above the rest; so that it is far better to obey in peace than to want to rule the world by command and hold kingdoms.
	/ proinde sine in cassum defessi sanguine sudent, angustum per iter luctantes ambitionis; quandoquidem sapiunt alieno ex ore petuntque res ex auditis potius quam sensibus ipsis, nec magis id nunc est neque erit mox quam fuit ante.	/ So let them sweat blood, worn out for nothing, struggling along the narrow road of ambition; since their wisdom comes from another's mouth, and they seek things on hearsay rather than from their own senses, and this is no more so now, nor will it be later, than it was before.
5.1136	Ergo regibus occisis subversa iacebat pristina maiestas soliorum et sceptra superba, et capitis summi praeclarum insigne cruentum sub pedibus vulgi magnum lugebat honorem; nam cupide conculcatur nimis ante metutum. res itaque ad summam faecem turbasque redibat, imperium sibi cum ac summatum quisque petebat. inde magistratum partim docuere creare iuraque constituere, ut vellent legibus uti. nam genus humanum, defessum vi colere aevom, ex inimicitiis languebat; quo magis ipsum sponte sua cecidit sub leges artaque iura. acrius ex ira quod enim se quisque parabat ulcisci quam nunc concessumst legibus aequis, hanc ob rem est homines pertaesum vi colere aevom. inde metus maculat poenarum praemia vitae.	So the kings were slain, and overthrown lay the ancient majesty of thrones and the proud scepters, and the glorious emblem of the highest head, bloodied, beneath the feet of the mob, mourned its great honor; for what was once too much feared is eagerly trampled. So things sank back to the lowest dregs and to turmoil, as each man sought power and supremacy for himself. Then some of them taught the people to create magistrates and to set up rules of justice, so that they would be willing to use laws. For the human race, worn out with living by violence, was languishing from its feuds; so all the more readily it fell of its own accord under laws and strict justice. For since each man in anger was ready to avenge himself more harshly than is now allowed under fair laws, for this reason men grew weary of living by viol-

	LATIN	ENGLISH
		ence. From then on, fear of punishment taints the prizes of life.
	/ circumretit enim vis atque iniuria quemque atque unde exortast, ad eum plerumque revertit, nec facilest placidam ac pacatam degere vitam qui violat factis communia foedera pacis. etsi fallit enim divom genus humanumque, perpetuo tamen id fore clam diffidere debet; quippe ubi se multi per somnia saepe loquentes aut morbo delirantes protraxe ferantur et celata [mala] in medium et peccata dedisse.	/ For violence and wrong ensnare each man who commits them and, as a rule, recoil on the one from whom they sprang, nor is it easy to lead a calm and peaceful life for one who by his deeds breaks the common pacts of peace. For though he escapes the notice of the race of gods and men, still he must doubt that it will stay hidden forever; since many, talking in their sleep, as often happens, or raving in fever, are said to have betrayed themselves and brought long-hidden wrongs and sins into the open.

THE ORIGIN OF RELIGION

Dreams and ignorance of the heavens lead people to believe in powerful, angry gods.

	LATIN	ENGLISH
5.1161	Nunc quae causa deum per magnas numina gentis pervulgarit et ararum compleverit urbis suscipiendaque curarit sollemnia sacra, quae nunc in magnis florent sacra rebus locisque, unde etiam nunc est mortalibus insitus horror, qui delubra deum nova toto suscitat orbi terrarum et festis cogit celebrare diebus, non ita difficilest rationem reddere verbis. quippe etenim iam tum divom mortalia saecla egregias animo facies vigilante videbant et magis in somnis mirando corporis auctu. his igitur sensum tribuebant propterea quod membra movere videbantur vocesque superbas mittere pro facie praeclara et viribus amplis.	Now, what cause spread the divine power of the gods among great nations, and filled cities with altars, and saw to the undertaking of solemn rites, rites which now flourish in great states and places, from which even now there is implanted in mortals the dread that raises new shrines of the gods over the whole world and drives them to throng them on festal days— it is not so hard to give an account of this in words. For even then the tribes of mortals would see splendid forms of the gods with waking mind, and still more in sleep, of wondrous bodily size. To these, then, they attributed sensation, because they seemed to move their limbs and utter proud words befitting their splendid looks and ample strength.
	/ aeternamque dabant vitam, quia semper eorum subpeditabatur facies et forma manebat, et tamen omnino quod tantis viribus auctos non temere ulla vi convinci posse putabant. fortunisque ideo longe praestare putabant, quod mortis timor haut quemquam vexaret eorum, et simul in somnis quia multa et mira videbant	/ And they gave them everlasting life, because their appearance was constantly supplied afresh and their form remained, and above all because they thought that beings endowed with such strength could not easily be overcome by any force.

	LATIN	ENGLISH
	efficere et nullum capere ipsos inde laborem. praeterea caeli rationes ordine certo et varia annorum cernebant tempora verti nec poterant quibus id fieret cognoscere causis. ergo perfugium sibi habebant omnia divis tradere et illorum nutu facere omnia flecti.	And so they thought them far superior in happiness, because the fear of death troubled none of them, and at the same time because in sleep they saw them accomplish many wonders and yet feel no effort from it themselves. Besides, they saw the workings of the sky in fixed order and the various seasons of the year come round, and could not find out by what causes this came about. So they took refuge in handing everything over to the gods and making everything turn at their nod.
	/ in caeloque deum sedes et templa locarunt, per caelum volvi quia nox et luna videtur, luna dies et nox et noctis signa severa noctivagaeque faces caeli flammaeque volantes, nubila sol imbres nix venti fulmina grando et rapidi fremitus et murmura magna minarum.	/ And they placed the dwellings and precincts of the gods in the sky, because through the sky night and the moon are seen to wheel, moon, day and night, and night's austere constellations, and the night-wandering torches of the sky and flying flames, clouds, sun, rains, snow, winds, lightning, hail, and sudden roarings and great threatening rumbles.
5.1194	O genus infelix humanum, talia divis cum tribuit facta atque iras adiunxit acerbas! quantos tum gemitus ipsi sibi, quantaque nobis volnera, quas lacrimas peperere minoribus nostris! nec pietas ullast velatum saepe videri vertier ad lapidem atque omnis accedere ad aras nec procumbere humi prostratum et pandere palmas ante deum delubra nec aras sanguine multo spargere quadrupedum nec votis nectere vota, sed mage pacata posse omnia mente tueri.	O unhappy race of men, to ascribe such deeds to the gods and add bitter anger to them! What groans they bred then for themselves, what wounds for us, what tears for our descendants! It is no piety to be seen often, with covered head, turning toward a stone and approaching every altar, nor to fall prostrate on the ground and spread out your palms before the shrines of the gods, nor to drench the altars with much blood of four-footed beasts, nor to string vow upon vow, but rather to be able to look on all things with a mind at peace.
	/ nam cum suspicimus magni caelestia mundi templa super stellisque micantibus aethera fixum, et venit in mentem solis lunaeque viarum, tunc aliis oppressa malis in pectora cura illa quoque expergefactum caput erigere infit, ne quae forte deum nobis inmensa potestas sit, vario motu quae candida sidera verset;	/ For when we look up at the heavenly precincts of the great world above, and the ether studded with twinkling stars, and the paths of the sun and moon come to mind, then into hearts already weighed down by other ills

LATIN	ENGLISH
temptat enim dubiam mentem rationis egestas, ecquae nam fuerit mundi genitalis origo, et simul ecquae sit finis, quoad moenia mundi et taciti motus hunc possint ferre laborem, an divinitus aeterna donata salute perpetuo possint aevi labentia tractu inmensi validas aevi contemnere viris.	that anxiety too begins to rear its reawakened head: that perhaps some boundless power of the gods may hold sway over us, turning the bright stars in their varied motion; for lack of reasoning assails the doubting mind with questions: was there ever a birth, a beginning of the world, and is there likewise an end, how long the walls of the world and their silent motions can bear this strain, or whether, endowed by the gods with everlasting safety, gliding on through the endless stretch of time, they can defy the mighty forces of immeasurable age.
/ praeterea cui non animus formidine divum contrahitur, cui non correpunt membra pavore, fulminis horribili cum plaga torrida tellus contremit et magnum percurrunt murmura caelum? non populi gentesque tremunt, regesque superbi corripiunt divum percussi membra timore, ne quod ob admissum foede dictumve superbe poenarum grave sit solvendi tempus adauctum? summa etiam cum vis violenti per mare venti induperatorem classis super aequora verrit cum validis pariter legionibus atque elephantis, non divom pacem votis adit ac prece quaesit ventorum pavidus paces animasque secundas? ne quiquam, quoniam violento turbine saepe correptus nihilo fertur minus ad vada leti.	/ Besides, whose mind does not shrink in fear of the gods, whose limbs do not creep with dread, when the scorched earth quakes beneath the terrible stroke of lightning, and rumblings run across the great sky? Do not peoples and nations tremble, and proud kings shrink in every limb, struck with fear of the gods, in case for some foul deed or arrogant word the heavy time for paying the penalty has come to ripeness? When, too, the utmost force of a violent wind at sea sweeps a fleet's commander over the waters, together with his mighty legions and elephants, does he not court the gods' peace with vows, and in terror beg in prayer for peace from the winds and favoring breezes? In vain, since often he is caught in a violent whirlwind and carried none the less to the shoals of death.
/ usque adeo res humanas vis abdita quaedam opterit et pulchros fascis saevasque secures proculcare ac ludibrio sibi habere videtur. denique sub pedibus tellus cum tota vacillat concussaeque cadunt urbes dubiaeque minantur, quid mirum si se temnunt mortalia saecla atque potestatis magnas mirasque relinquunt in rebus viris divum, quae cuncta gubernent?	/ So utterly does some hidden force grind down human affairs, and the splendid rods and cruel axes it seems to trample underfoot and make its sport. Lastly, when the whole earth rocks beneath our feet, and cities fall shaken or totter and threaten to fall, what wonder if mortal races despise themselves

LATIN	ENGLISH
	and leave room in the world for great and wondrous powers of the gods, to govern all things?

METALS AND WAR

Metals are discovered, bronze gives way to iron, and even wild beasts are tried in battle.

LATIN	ENGLISH
5.1241 Quod super est, ae[s at]que aurum ferrumque repertumst et simul argenti pondus plumbique potestas, ignis ubi ingentis silvas ardore cremarat montibus in magnis, seu caelo fulmine misso, sive quod inter se bellum silvestre gerentes hostibus intulerant ignem formidinis ergo, sive quod inducti terrae bonitate volebant pandere agros pinguis et pascua reddere rura, sive feras interficere et ditescere praeda; nam fovea atque igni prius est venarier ortum quam saepire plagis saltum canibusque ciere. quicquid id est, qua cumque e causa flammeus ardor horribili sonitu silvas exederat altis a radicibus et terram percoxerat igni, manabat venis ferventibus in loca terrae concava conveniens argenti rivus et auri, aeris item et plumbi.	To continue: copper and gold and iron were discovered, and with them heavy silver and potent lead, when fire with its heat had burned up huge forests on great mountains, whether from lightning hurled from the sky, or because men, waging a woodland war with one another, had carried fire against their enemies to terrify them, or because, lured by the richness of the soil, they wanted to clear fat fields and turn the countryside into pasture, or to kill wild beasts and grow rich on the spoils; for hunting with pit and fire arose earlier than fencing a glade with nets and rousing it with dogs. Whatever it was, from whatever cause the flaming heat had devoured the forests with a terrible roar from their deep roots and baked the earth through with fire, there would trickle from the boiling veins into hollow places in the earth, and gather there, a stream of silver and gold, of copper too, and lead.
quae cum concreta videbant posterius claro in terra splendere colore, tollebant nitido capti levique lepore, et simili formata videbant esse figura atque lacunarum fuerant vestigia cuique. tum penetrabat eos posse haec liquefacta calore quamlibet in formam et faciem decurrere rerum, et prorsum quamvis in acuta ac tenvia posse mucronum duci fastigia procudendo, ut sibi tela parent silvasque ut caedere possint materiemque dolare et levia radere tigna et terebrare etiam ac pertundere perque forare. nec minus argento facere haec auroque parabant	When they saw these, hardened, shining afterwards on the ground with bright color, they picked them up, captivated by their gleaming, smooth charm, and saw that each had been molded in a shape like the imprint of the hollow it had lain in. Then it dawned on them that these, melted by heat, could run into any form and shape of things, and could even be hammered out and drawn into points and edges as sharp and fine as you like, so that they might make weapons for themselves,

	LATIN	ENGLISH
	quam validi primum violentis viribus aeris, ne quiquam, quoniam cedebat victa potestas nec poterant pariter durum sufferre laborem.	fell forests, hew timber, plane beams smooth, and bore and punch and drill holes too. And at first they set about doing these things with silver and gold no less than with the violent strength of sturdy bronze— in vain, since their power gave way, defeated, and could not equally endure the hard work.
	/ nam fuit in pretio magis aes aurumque iacebat propter inutilitatem hebeti mucrone retusum; nunc iacet aes, aurum in summum successit honorem. sic volvenda aetas commutat tempora rerum. quod fuit in pretio, fit nullo denique honore; porro aliud succedit et [e] contemptibus exit inque dies magis adpetitur floretque repertum laudibus et miro est mortalis inter honore.	/ For bronze was more highly prized, and gold lay neglected, useless, its blunted edge turned back; now bronze lies neglected, and gold has risen to the highest honor. So rolling time changes the seasons of things. What was prized becomes in the end of no esteem; then something else takes its place and emerges from contempt, and is sought more each day, and once discovered it flowers with praise, and is held in wondrous honor among mortals.
5.1281	Nunc tibi quo pacto ferri natura reperta sit facilest ipsi per te cognoscere, Memmi. arma antiqua manus ungues dentesque fuerunt et lapides et item silvarum fragmina rami et flamma atque ignes, post quam sunt cognita primum. posterius ferri vis est aerisque reperta. et prior aeris erat quam ferri cognitus usus, quo facilis magis est natura et copia maior. aere solum terrae tractabant, aereque belli miscebant fluctus et vulnera vasta serebant et pecus atque agros adimebant; nam facile ollis omnia cedebant armatis nuda et inerma. inde minutatim processit ferreus ensis versaque in obprobrium species est falcis ahenae, et ferro coepere solum proscindere terrae exaequataque sunt creperi certamina belli.	Now, how the nature of iron was discovered you can easily learn for yourself, Memmius. The earliest weapons were hands, nails and teeth, and stones, and branches broken from the forests, and flame and fires, once they first became known. Later the power of iron and bronze was discovered. And the use of bronze was known before that of iron, since its nature is easier to work and its supply more plentiful. With bronze they tilled the soil, with bronze they stirred the waves of war and sowed gaping wounds and seized flocks and fields; for easily to them, armed as they were, all things gave way, naked and defenseless. Then little by little the iron sword came forward, and the form of the bronze sickle came to be scorned, and they began to break the soil of the earth with iron, and the struggles of uncertain war were made equal.

	LATIN	ENGLISH
	/ et prius est armatum in equi conscendere costas et moderarier hunc frenis dextraque vigere quam biiugo curru belli temptare pericla. et biiugo prius est quam bis coniungere binos et quam falciferos armatum escendere currus. inde boves Lucas turrito corpore, tetras, anguimanus, belli docuerunt volnera Poeni sufferre et magnas Martis turbare catervas. sic alid ex alio peperit discordia tristis, horribile humanis quod gentibus esset in armis, inque dies belli terroribus addidit augmen.	/ And to mount armed on a horse's back, guiding it with the reins while the right hand fights, came before trying the perils of war in a two-horse chariot. And the pair came before yoking two pairs, and before mounting armed on scythed chariots. Then the Carthaginians taught Lucanian oxen, grim beasts with towered bodies and snake-like hands, to endure the wounds of war and throw into confusion the great ranks of Mars. So grim discord bred one thing after another to be a terror in arms to the races of men, and day by day added increase to the horrors of war.[11]
5.1308	Temptarunt etiam tauros in moenere belli expertique sues saevos sunt mittere in hostis. et validos partim prae se misere leones cum doctoribus armatis saevisque magistris, qui moderarier his possent vinclisque tenere, ne quiquam, quoniam permixta caede calentes turbabant saevi nullo discrimine turmas, terrificas capitum quatientis undique cristas, nec poterant equites fremitu perterrita equorum pectora mulcere et frenis convertere in hostis. inritata leae iaciebant corpora saltu undique et adversum venientibus ora patebant et nec opinantis a tergo deripiebant deplexaeque dabant in terram volnere victos, morsibus adfixae validis atque unguibus uncis. iactabantque suos tauri pedibusque terebant et latera ac ventres hauribant supter equorum cornibus et terram minitanti mente ruebant.	They tried bulls too in the service of war, and made trial of sending savage boars against the enemy. And some sent mighty lions before them with armed trainers and harsh masters who could control them and hold them in chains— in vain, since, hot with the indiscriminate slaughter, the savage beasts threw the squadrons into disorder, making no distinction, shaking their terrifying manes all around, nor could the riders soothe the hearts of their horses, terrified by the roaring, and turn them with the reins against the enemy. The lionesses, enraged, flung their bodies in leaps on every side, and went for the faces of those coming at them, and dragged others down from behind, unawares, and clasping them, brought them to the ground, overcome by wounds, clinging with powerful bites and hooked claws. And the bulls tossed their own side and trampled them underfoot, and gored the flanks and bellies of the horses from beneath with their horns, and tore up the ground with menacing intent.
	/ et validis socios caedebant dentibus apri tela infracta suo tinguentes sanguine saevi	/ And the boars slashed their allies with their powerful tusks,

11 Romans called elephants "Lucanian oxen," having first met them in Lucania, in southern Italy, during the war with Pyrrhus (280 BC).

	LATIN	ENGLISH
	[in se fracta suo tinguentes sanguine tela,] permixtasque dabant equitum peditumque ruinas. nam transversa feros exibant dentis adactus iumenta aut pedibus ventos erecta petebant, ne quiquam, quoniam ab nervis succisa videres concidere atque gravi terram consternere casu. si quos ante domi domitos satis esse putabant, effervescere cernebant in rebus agundis volneribus clamore fuga terrore tumultu, nec poterant ullam partem redducere eorum; diffugiebat enim varium genus omne ferarum, ut nunc saepe boves Lucae ferro male mactae diffugiunt, fera facta suis cum multa dedere.	savagely staining with their own blood the weapons broken in them, [staining with their own blood the weapons broken in their bodies,] and wrought havoc among horse and foot alike. For the horses would shy aside to escape the savage thrust of the tusks, or rear up and paw the winds with their hooves— in vain, since you would see them, hamstrung, collapse and strew the ground with their heavy fall. Any they had thought before were tame enough at home they saw boil over in the heat of action from wounds, shouting, flight, terror, uproar, and they could not bring back any part of them; for every kind of wild beast scattered in all directions, as now Lucanian oxen, cruelly wounded by the steel, often scatter, after dealing many savage blows to their own side.
5.1341	Sed facere id non tam vincendi spe voluerunt; quam dare quod gemerent hostes, ipsique perire, qui numero diffidebant armisque vacabant, si fuit ut facerent. sed vix adducor ut ante non quierint animo praesentire atque videre, quam commune malum fieret foedumque, futurum. et magis id possis factum contendere in omni in variis mundis varia ratione creatis, quam certo atque uno terrarum quolibet orbi.	But they wanted to do this not so much in hope of victory as to give the enemy cause to groan, even if they themselves perished— those who distrusted their numbers and lacked weapons— if indeed they did it at all. But I can hardly be brought to believe that they could not foresee in their minds and see before it happened that this would become a shared and hideous evil. And you could more readily maintain that this happened in the universe at large, in the various worlds created in various ways, than on any one particular earth.

THE ARTS OF PEACE

Weaving, farming, music and the other arts develop step by step through experience.

	LATIN	ENGLISH
5.1350	Nexilis ante fuit vestis quam textile tegmen. textile post ferrumst, quia ferro tela paratur, nec ratione alia possunt tam levia gigni insilia ac fusi, radii, scapique sonantes. et facere ante viros lanam natura coëgit quam muliebre genus; nam longe praestat in arte et sollertius est multo genus omne virile;	Plaited clothing came before woven garments. Weaving came after iron, since a loom is made with iron, and in no other way can such smooth things be made as treadles and spindles, shuttles and clattering

	LATIN	ENGLISH
	agricolae donec vitio vertere severi, ut muliebribus id manibus concedere vellent atque ipsi pariter durum sufferre laborem atque opere in duro durarent membra manusque.	loom-rods. And nature compelled men to work wool before womankind; for the whole male sex is far superior in skill and much more ingenious; until the stern farmers made it a reproach, so that men were willing to leave it to women's hands and themselves share in enduring hard labor, and in hard work hardened their limbs and hands.
5.1361	At specimen sationis et insitionis origo ipsa fuit rerum primum natura creatrix, arboribus quoniam bacae glandesque caducae tempestiva dabant pullorum examina supter; unde etiam libitumst stirpis committere ramis et nova defodere in terram virgulta per agros. inde aliam atque aliam culturam dulcis agelli temptabant fructusque feros mansuescere terra cernebant indulgendo blandeque colendo. inque dies magis in montem succedere silvas cogebant infraque locum concedere cultis, prata lacus rivos segetes vinetaque laeta collibus et campis ut haberent, atque olearum caerula distinguens inter plaga currere posset per tumulos et convallis camposque profusa; ut nunc esse vides vario distincta lepore omnia, quae pomis intersita dulcibus ornant arbustisque tenent felicibus opsita circum.	But the model for sowing and the origin of grafting was first nature herself, creator of things, since berries and acorns falling from the trees put forth in due season swarms of shoots beneath them; from which men also took the fancy to graft slips onto branches and to plant new saplings in the ground across the fields. Then they tried one way after another of tilling their sweet little plot, and saw wild fruits grow tame in the soil through their indulgence and gentle tending. And day by day they made the forests climb higher up the mountains and yield the ground below to cultivation, so that they might have meadows, pools, streams, crops and flourishing vineyards on hills and plains, and a gray-green belt of olives might run between, marking the boundaries, spread over hillocks and valleys and plains; as now you see it all, marked out with varied charm— all that they adorn, setting sweet fruit trees among it, and keep hedged round with fruitful trees and shrubs.
5.1379	At liquidas avium voces imitarier ore ante fuit multo quam levia carmina cantu concelebrare homines possent aurisque iuvare. et zephyri cava per calamorum sibila primum agrestis docuere cavas inflare cicutas. inde minutatim dulcis didicere querellas, tibia quas fundit digitis pulsata canentum, avia per nemora ac silvas saltusque reperta, per loca pastorum deserta atque otia dia. [sic unum quicquid paulatim protrahit aetas] [in medium ratioque in luminis eruit oras.] haec animos ollis mulcebant atque iuvabant	But imitating the liquid notes of birds with the mouth came long before men could join in singing smooth songs and give pleasure to the ear. And the whistling of the west wind through hollow reeds first taught country folk to blow into hollow hemlock stalks. Then little by little they learned the sweet laments which the pipe pours out when played by the mu-

LATIN	ENGLISH
cum satiate cibi; nam tum sunt omnia cordi. saepe itaque inter se prostrati in gramine molli propter aquae rivom sub ramis arboris altae.	sicians' fingers, the pipe discovered in pathless groves and woods and glades, in the lonely haunts of shepherds and their divine leisure. [So time, little by little, brings each single thing] [into view, and reason raises it into the shores of light.] These things soothed and delighted their minds when they had had their fill of food; for then all things are welcome. So often, lying together on the soft grass by a stream of water under the branches of a tall tree,
/ non magnis opibus iucunde corpora habebant, praesertim cum tempestas ridebat et anni tempora pingebant viridantis floribus herbas. tum ioca, tum sermo, tum dulces esse cachinni consuerant; agrestis enim tum musa vigebat. tum caput atque umeros plexis redimire coronis floribus et foliis lascivia laeta movebat, atque extra numerum procedere membra moventes duriter et duro terram pede pellere matrem; unde oriebantur risus dulcesque cachinni, omnia quod nova tum magis haec et mira vigebant. et vigilantibus hinc aderant solacia somno ducere multimodis voces et flectere cantus et supera calamos unco percurrere labro; unde etiam vigiles nunc haec accepta tuentur.	/ they would refresh their bodies pleasantly at little cost, especially when the weather smiled and the seasons of the year painted the green grass with flowers. Then jokes, then talk, then sweet peals of mirth were their custom; for then the rustic Muse was in her prime. Then playful merriment would prompt them to wreathe head and shoulders with garlands woven of flowers and leaves, and to step out of time, moving their limbs clumsily, and with clumsy foot to stamp on mother earth; from which arose laughter and sweet peals of mirth, because all these things were then newer and more wonderful, and in their prime. And for those who lay awake, here was solace for lost sleep: to lead the voice in many ways and bend the melody, and run over the reeds with curling lip; from which even now the watchmen keep up these customs they received.
/ et numerum servare genus didicere, neque hilo maiore interea capiunt dulcedine fructum quam silvestre genus capiebat terrigenarum. nam quod adest praesto, nisi quid cognovimus ante suavius, in primis placet et pollere videtur, posteriorque fere melior res illa reperta perdit et immutat sensus ad pristina quaeque. sic odium coepit glandis, sic illa relicta strata cubilia sunt herbis et frondibus aucta.	/ and have learned to keep time in each kind of tune; yet not a whit more sweetness do they reap from it in the meantime than the woodland race of earth-born people once reaped. For what is at hand, unless we have known something sweeter before, pleases us above all and seems supreme;

	LATIN	ENGLISH
	pellis item cecidit vestis contempta ferina; quam reor invidia tali tunc esse repertam, ut letum insidiis qui gessit primus obiret, et tamen inter eos distractam sanguine multo disperiise neque in fructum convertere quisse.	then, as a rule, the better thing found later spoils it and turns our feelings against everything of old. So acorns came to be loathed; so those beds strewn with grass and heaped with leaves were abandoned. Clothing of wild beasts' skin likewise fell into contempt— yet I suppose that, when first found, it roused such envy that whoever first wore it met his death by ambush, and that, torn to pieces among them with much bloodshed, it was ruined and could not be put to any use.
	/ tunc igitur pelles, nunc aurum et purpura curis exercent hominum vitam belloque fatigant; quo magis in nobis, ut opinor, culpa resedit. frigus enim nudos sine pellibus excruciabat terrigenas; at nos nil laedit veste carere purpurea atque auro signisque ingentibus apta, dum plebeia tamen sit, quae defendere possit.	/ Then it was skins, now it is gold and purple that harry human life with cares and wear it down with war; and here, I think, the greater blame lies with us. For cold tormented them, naked, without skins, the earth-born; but it does us no harm to go without a robe of purple, set off with gold and great embroidered figures, so long as we have a plain one that can shield us.
5.1430	Ergo hominum genus in cassum frustraque laborat semper et [in] curis consumit inanibus aevom, ni mirum quia non cognovit quae sit habendi finis et omnino quoad crescat vera voluptas; idque minutatim vitam provexit in altum et belli magnos commovit funditus aestus. at vigiles mundi magnum versatile templum sol et luna suo lustrantes lumine circum perdocuere homines annorum tempora verti et certa ratione geri rem atque ordine certo.	So the human race toils in vain, to no purpose, forever, and wastes its life in empty cares, no doubt because it has not learned where possession ends, and how far true pleasure can grow at all; and this, little by little, has carried life out into deep water and stirred up from the depths the great tides of war. But the world's watchmen, circling the great revolving vault of heaven, the sun and moon, sweeping round it with their light, taught people thoroughly that the seasons of the year come round and that all is carried on by a fixed plan and in fixed order.
5.1440	Iam validis saepti degebant turribus aevom, et divisa colebatur discretaque tellus, tum mare velivolis florebat navibus ponti, auxilia ac socios iam pacto foedere habebant, carminibus cum res gestas coepere poëtae tradere; nec multo prius sunt elementa reperta.	By now people lived their lives fenced in by strong towers, and the land was parceled out and marked off for tilling; the sea now bloomed with ships flying under sail; they had allies and helpers, bound by treaty,

	LATIN	ENGLISH
	propterea quid sit prius actum respicere aetas nostra nequit, nisi qua ratio vestigia monstrat.	when poets began to hand down in song the deeds of the past; and letters were found not long before. So what was done before that, our age cannot look back upon, except where reasoning points out the traces.
5.1448	Navigia atque agri culturas moenia leges arma vias vestes [et] cetera de genere horum, praemia, delicias quoque vitae funditus omnis, carmina, picturas et daedala signa polita usus et impigrae simul experientia mentis paulatim docuit pedetemptim progredientis. sic unum quicquid paulatim protrahit aetas in medium ratioque in luminis erigit oras; namque alid ex alio clarescere corde videbant, artibus ad summum donec venere cacumen.	Ships and the tilling of fields, city walls, laws, arms, roads, clothing, and all the rest of this kind, rewards, and every one of life's luxuries as well, poems, paintings, and cunningly wrought, polished statues— these were taught by practice and the trials of the tireless mind, little by little, to people advancing step by step. So time, little by little, brings each single thing into view, and reason raises it into the shores of light; for they saw one thing after another grow clear in their minds, until by their arts they reached the highest peak.

Book VI

Nature's wonders
Thunder, earthquakes, volcanoes, magnets, disease, and the plague of Athens.

	LATIN	ENGLISH
6.1	Primae frugiparos fetus mortalibus aegris dididerunt quondam praeclaro nomine Athenae et recreaverunt vitam legesque rogarunt et primae dederunt solacia dulcia vitae, cum genuere virum tali cum corde repertum, omnia veridico qui quondam ex ore profudit; cuius et extincti propter divina reperta divolgata vetus iam ad caelum gloria fertur.	First, long ago, to suffering mortals, the grain-bearing crops were given out by Athens of glorious name; she renewed their life and passed laws, and she first gave sweet comforts for life when she bore a man found to have such a mind that he poured out all things from truth-telling lips; and now that he is dead, for his godlike discoveries his glory, spread abroad from of old, is carried up to the sky.
	/ nam cum vidit hic ad victum quae flagitat usus omnia iam ferme mortalibus esse parata et, pro quam possent, vitam consistere tutam, divitiis homines et honore et laude potentis affluere atque bona gnatorum excellere fama, nec minus esse domi cuiquam tamen anxia cordi, atque animi ingratis vitam vexare sine ulla pausa atque infestis cogi saevire querellis, intellegit ibi vitium vas efficere ipsum omniaque illius vitio corrumpier intus, quae conlata foris et commoda cumque venirent; partim quod fluxum pertusumque esse videbat, ut nulla posset ratione explerier umquam, partim quod taetro quasi conspurcare sapore omnia cernebat, quae cumque receperat, intus.	/ For when he saw that almost everything need demands for living was already provided for mortals, and that, as far as could be, their life was secure; that the powerful abounded in wealth and honor and praise, and stood out through the good name of their children; and yet that at home no one had a heart any less anxious, but that hearts vexed their lives in spite of themselves, without any pause, and were driven to rage in bitter complaint — then he understood that the fault lay in the vessel itself, and that by its fault everything was spoiled within, whatever came into it from outside, however good; partly because he saw it was leaky and full of holes, so that it could never by any means be filled, partly because he saw that it fouled, as it were, with a vile taste everything it had taken in.

	LATIN	ENGLISH
	/ veridicis igitur purgavit pectora dictis et finem statuit cuppedinis atque timoris exposuitque bonum summum, quo tendimus omnes, quid foret, atque viam monstravit, tramite parvo qua possemus ad id recto contendere cursu, quidve mali foret in rebus mortalibus passim, quod fieret naturali varieque volaret seu casu seu vi, quod sic natura parasset, et quibus e portis occurri cuique deceret, et genus humanum frustra plerumque probavit volvere curarum tristis in pectore fluctus. nam vel uti pueri trepidant atque omnia caecis in tenebris metuunt, sic nos in luce timemus inter dum, nihilo quae sunt metuenda magis quam quae pueri in tenebris pavitant finguntque futura.	/ So with truth-telling words he cleansed our hearts and set a limit to desire and fear, and set forth the highest good, toward which we all strive— what it was—and showed the way by which, along a narrow track, we might press on toward it on a straight course; and what evil there is everywhere in human affairs, which happens and flies about in various ways, by natural chance or force, since nature had so arranged it; and from what gates each should be met; and he proved that the human race for the most part vainly tosses the gloomy waves of care within its breast. For just as children tremble and fear everything in blind darkness, so we in the light are afraid at times of things no more to be feared than what children shudder at in the dark and imagine will come.
	/ hunc igitur terrorem animi tenebrasque necessest non radii solis nec lucida tela diei discutiant, sed naturae species ratioque. quo magis inceptum pergam pertexere dictis.	/ This terror of the mind, then, and this darkness must be dispelled not by the rays of the sun or the bright shafts of day, but by the face of nature and her reasoning. So all the more shall I go on weaving with words the work I have begun.
6.43	Et quoniam docui mundi mortalia templa esse [et] nativo consistere corpore caelum, et quae cumque in eo fiunt fierique necessest pleraque dissolui, qui restant percipe porro, quandoquidem semel insignem conscendere currum ... tu mihi supremae praescripta ad candida callis currenti spatium praemonstra, callida musa Calliope, requies hominum divomque voluptas, te duce ut insigni capiam cum laude coronam. ... ventorum existant, placentur [ut] omnia rursum ... quae fuerint, sint placato conversa furore.	

LATIN	ENGLISH
	And since I have taught that the realms of the world are mortal and that the sky is made of a body that was born, and that most of what happens in it, and must happen, is dissolved, now learn what remains, since once I am to mount the splendid chariot ... You, as I race toward the chalk line at the end of the course, show me the track ahead, O skillful Muse, Calliope, rest of men and delight of gods, so that with you as guide I may win the crown with signal praise. ... of the winds arise, so that all is calmed again, ... what had been, is turned about once the fury is calmed.[1]
/ cetera quae fieri in terris caeloque tuentur mortales, pavidis cum pendent mentibus saepe et faciunt animos humilis formidine divom depressosque premunt ad terram propterea quod ignorantia causarum conferre deorum cogit ad imperium res et concedere regnum.	/ and the other things mortals see happen on earth and in the sky, when they often hang in suspense with fearful minds— things that humble their minds with fear of the gods and press them down, bowed, to the earth, because ignorance of causes forces them to assign things to the command of the gods and to grant them kingship.
/ [quorum operum causas nulla ratione videre] [possunt ac fieri divino numine rentur.] nam bene qui didicere deos securum agere aevom, si tamen interea mirantur qua ratione quaeque geri possint, praesertim rebus in illis quae supera caput aetheriis cernuntur in oris, rursus in antiquas referuntur religionis et dominos acris adsciscunt, omnia posse quos miseri credunt, ignari quid queat esse, quid nequeat, finita potestas denique cuique qua nam sit ratione atque alte terminus haerens; quo magis errantes caeca ratione feruntur.	/ [Whose causes they can in no way see,] [and they suppose these things happen by divine will.] For even those who have learned well that the gods lead a carefree life, if all the same they wonder by what means each thing can be carried on, above all those things that are seen overhead in the regions of the upper air, are carried back again into the old religions and take on harsh masters, able to do all things, so the wretches believe, not knowing what can be and what cannot—in short, by what principle each thing has its limited power and its deep-set boundary stone;

1 Calliope is the Muse of epic poetry; Lucretius plays on her name with callis ("track") and callida ("skillful").

LATIN	ENGLISH
	so they stray all the more, carried along by blind reasoning.
/ quae nisi respuis ex animo longeque remittis dis indigna putare alienaque pacis eorum, delibata deum per te tibi numina sancta saepe oberunt; non quo violari summa deum vis possit, ut ex ira poenas petere inbibat acris, sed quia tute tibi placida cum pace quietos constitues magnos irarum volvere fluctus, nec delubra deum placido cum pectore adibis, nec de corpore quae sancto simulacra feruntur in mentes hominum divinae nuntia formae, suscipere haec animi tranquilla pace valebis. inde videre licet qualis iam vita sequatur.	/ Unless you spit these out of your mind and cast far from you thoughts unworthy of the gods and foreign to their peace, the holy powers of the gods, belittled by you, will often harm you—not that the supreme power of the gods can be outraged, so as to thirst in anger for harsh revenge, but because you will picture them, at rest in quiet peace, as tossing great billows of wrath; you will not approach the shrines of the gods with a quiet heart, nor the images that travel from their holy bodies into the minds of men, heralds of divine form— you will not have the calm peace of mind to take these in. From this you can see what sort of life must follow.
/ quam quidem ut a nobis ratio verissima longe reiciat, quamquam sunt a me multa profecta, multa tamen restant et sunt ornanda politis versibus; est ratio caeli〈QUE igni〉sque tenenda, sunt tempestates et fulmina clara canenda, quid faciant et qua de causa cumque ferantur; ne trepides caeli divisis partibus amens, unde volans ignis pervenerit aut in utram se verterit hinc partim, quo pacto per loca saepta insinuarit, et hinc dominatus ut extulerit se. [quorum operum causas nulla ratione videre] [possunt ac fieri divino numine rentur.]	/ And so that the truest reasoning may drive such a life far from us, though much has already gone forth from me, much still remains, and must be adorned with polished verse: I must grasp the account of sky and fire, I must sing of storms and the bright thunderbolt, what they do and from what cause they are borne on, so that you do not divide the sky into sections and tremble, out of your wits, at where the flying fire has come from, or to which side it has turned from there, how through enclosed places it has wormed its way, and how, having lorded it there, it has got out again. [Whose causes they can in no way see,] [and they suppose these things happen by divine will.][2]

2 Etruscan diviners divided the sky into sectors and read omens from where lightning came and went.

THUNDER AND LIGHTNING

Colliding clouds and winds produce thunder, lightning and the thunderbolt.

	LATIN	ENGLISH
6.96	Principio tonitru quatiuntur caerula caeli propterea quia concurrunt sublime volantes aetheriae nubes contra pugnantibus ventis. nec fit enim sonitus caeli de parte serena, verum ubi cumque magis denso sunt agmine nubes, tam magis hinc magno fremitus fit murmure saepe. praeterea neque tam condenso corpore nubes esse queunt quam sunt lapides ac ligna, neque autem tam tenues quam sunt nebulae fumique volantes; nam cadere aut bruto deberent pondere pressae ut lapides, aut ut fumus constare nequirent nec cohibere nives gelidas et grandinis imbris.	First, the blue of the sky is shaken with thunder because, flying aloft high in the ether, clouds collide as the winds battle against each other. For no sound comes from a clear part of the sky; but the more densely the clouds are massed anywhere, the more there often comes from there a roar with a great rumble. Besides, clouds cannot be of a body as dense as stones and timber are, nor again as thin as mists and drifting smoke; for either they would have to fall, pressed down by their dead weight, like stones, or, like smoke, they could not hold together or hold in the icy snow and the showers of hail.
6.108	Dant etiam sonitum patuli super aequora mundi, carbasus ut quondam magnis intenta theatris dat crepitum malos inter iactata trabesque, inter dum perscissa furit petulantibus auris et fragilis [sonitus] chartarum commeditatur; id quoque enim genus in tonitru cognoscere possis, aut ubi suspensam vestem chartasque volantis verberibus venti versant planguntque per auras. fit quoque enim inter dum [ut] non tam concurrere nubes frontibus adversis possint quam de latere ire diverso motu radentes corpora tractim, aridus unde auris terget sonus ille diuque ducitur, exierunt donec regionibus artis.	They also make a sound above the plains of the wide heavens, as at times an awning stretched over great theaters cracks as it tosses among the poles and beams, and at times, torn through, rages in the wanton breezes and imitates the crackling sound of paper; for you can recognize that kind of sound too in thunder, or when hanging clothes and flying sheets of paper are whirled and slapped through the air by the lashes of the wind. It also happens at times that clouds cannot so much meet head-on as pass along each other's flanks, moving in opposite directions, slowly grazing their bodies, and from this comes that dry sound that grates on the ears and is long drawn out, until they have come out of their narrow straits.
6.121	Hoc etiam pacto tonitru concussa videntur omnia saepe gravi tremere et divolsa repente maxima dissiluisse capacis moenia mundi, cum subito validi venti conlecta procella	In this way too, shaken by thunder, all things often seem to tremble heavily, and, torn apart suddenly, the mightiest walls of the capacious world seem to

	LATIN	ENGLISH
	nubibus intorsit sese conclusaque ibidem turbine versanti magis ac magis undique nubem cogit uti fiat spisso cava corpore circum, post ubi conminuit vis eius et impetus acer, tum perterricrepo sonitu dat scissa fragorem. nec mirum, cum plena animae vesicula parva saepe haud dat parvum sonitum displosa repente.	have burst asunder, when a gathered storm of mighty wind has suddenly twisted itself into the clouds and, shut up there, with its whirling eddy, more and more on every side, forces the cloud to become hollow, with a dense body all around; then, when its force and fierce onset have weakened the cloud, it is torn open and bursts with a terrifying crash. No wonder, since a little bladder full of air often makes no little noise when suddenly burst.
6.132	Est etiam ratio, cum venti nubila perflant, ut sonitus faciant; etenim ramosa videmus nubila saepe modis multis atque aspera ferri; scilicet ut, crebram silvam cum flamina cauri perflant, dant sonitum frondes ramique fragorem.	There is also a way, when winds blow through the clouds, for them to make sounds; for we see that clouds, branching and rough, are often borne along in many ways; just as, when the blasts of the northwest wind blow through a thick forest, the leaves rustle and the branches crash.
6.137	Fit quoque ut inter dum validi vis incita venti perscindat nubem perfringens impete recto; nam quid possit ibi flatus manifesta docet res, hic, ubi lenior est, in terra cum tamen alta arbusta evolvens radicibus haurit ab imis. sunt etiam fluctus per nubila, qui quasi murmur dant in frangendo graviter; quod item fit in altis fluminibus magnoque mari, cum frangitur aestus.	It also happens at times that the roused force of a strong wind tears through a cloud, breaking it with a straight charge; for what a blast can do up there, plain fact shows us here on earth, where it is gentler, when all the same it tumbles tall trees and wrenches them out from their deepest roots. There are waves, too, among the clouds, which give a kind of heavy roar as they break; the same happens in deep rivers and on the great sea, when the surf breaks.
6.145	Fit quoque, ubi e nubi in nubem vis incidit ardens fulminis; haec multo si forte umore recepit ignem, continuo magno clamore trucidat; ut calidis candens ferrum e fornacibus olim stridit, ubi in gelidum propter demersimus imbrem.	There is thunder, too, when the burning force of a thunderbolt falls from cloud to cloud; if the second cloud happens to take in the fire with much moisture, at once it kills it with a great outcry; as white-hot iron from a hot furnace at times hisses when we plunge it quickly into icy water.
6.150	Aridior porro si nubes accipit ignem, uritur ingenti sonitu succensa repente, lauricomos ut si per montis flamma vagetur turbine ventorum comburens impete magno;	Again, if a drier cloud takes in the fire, it is suddenly set alight and burns with a huge noise, as if a flame were to roam over laurel-crowned

	LATIN	ENGLISH
	nec res ulla magis quam Phoebi Delphica laurus terribili sonitu flamma crepitante crematur.	mountains in a whirlwind, burning them up with a great rush; and nothing burns like the Delphic laurel of Phoebus, with such a terrible noise, in the crackling of the flame.
6.156	Denique saepe geli multus fragor atque ruina grandinis in magnis sonitum dat nubibus alte; ventus enim cum confercit, franguntur in artum concreti montes nimborum et grandine mixti.	Lastly, a great crash of ice and a downfall of hail often make a sound high in great clouds; for when the wind crams them together, there break, squeezed tight, mountains of storm cloud, frozen and mixed with hail.
6.160	Fulgit item, nubes ignis cum semina multa excussere suo concursu, ceu lapidem si percutiat lapis aut ferrum; nam tum quoque lumen exilit et claras scintillas dissipat ignis. sed tonitrum fit uti post auribus accipiamus, fulgere quam cernant oculi, quia semper ad auris tardius adveniunt quam visum quae moveant res. id licet hinc etiam cognoscere: caedere si quem ancipiti videas ferro procul arboris auctum, ante fit ut cernas ictum quam plaga per auris det sonitum; sic fulgorem quoque cernimus ante quam tonitrum accipimus, pariter qui mittitur igni e simili causa, concursu natus eodem.	There is lightning, too, when clouds by their collision have struck out many seeds of fire, as if a stone were struck by stone or iron; for then too light leaps out and fire scatters bright sparks. But it happens that we take in the thunder with our ears after the eyes see the flash, because what reaches the ears always arrives more slowly than the things that move the sight. You can learn this from the following too: if you see someone far off chopping a tall tree with a double-edged axe, you see the stroke before the blow sounds in your ears; so too we see the lightning before we hear the thunder, which is sent out along with the fire from a like cause, born of the same collision.
6.173	Hoc etiam pacto volucri loca lumine tingunt nubes et tremulo tempestas impete fulgit. ventus ubi invasit nubem et versatus ibidem fecit ut ante cavam docui spissescere nubem, mobilitate sua fervescit; ut omnia motu percalefacta vides ardescere, plumbea vero glans etiam longo cursu volvenda liquescit. ergo fervidus hic nubem cum perscidit atram, dissipat ardoris quasi per vim expressa repente semina, quae faciunt nictantia fulgura flammae; inde sonus sequitur, qui tardius adlicit auris quam quae perveniunt oculorum ad lumina nostra. scilicet hoc densis fit nubibus et simul alte extructis aliis alias super impete miro.	In this way too clouds tinge places with flying light, and the storm flashes with a flickering rush. When wind has invaded a cloud and, whirling there, has made the cloud grow thick and hollow, as I showed before, it grows hot by its own speed; just as you see all things heated through by motion catch fire, and even a leaden sling bullet, spinning in a long flight, melts. So when this hot wind has torn through the black cloud,

	LATIN	ENGLISH
	ne tibi sit fraudi quod nos inferne videmus quam sint lata magis quam sursum extructa quid extent.	it scatters, suddenly squeezed out as if by force, the seeds of heat, which make the flickering flashes of flame; then follows the sound, which reaches our ears more slowly than what arrives at the light of our eyes. This, of course, happens when clouds are dense and at the same time piled high, one upon another, with wondrous force. Do not be deceived because we, from below, see how broad they are rather than how high they are piled.
	/ contemplator enim, cum montibus adsimulata nubila portabunt venti transversa per auras, aut ubi per magnos montis cumulata videbis insuper esse aliis alia atque urguere superna in statione locata sepultis undique ventis; tum poteris magnas moles cognoscere eorum speluncasque vel ut saxis pendentibus structas cernere, quas venti cum tempestate coorta conplerunt, 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 divolsa fulserunt nube corusci.	/ For just observe, when winds carry clouds shaped like mountains slanting across the sky through the air, or when you see them heaped over great mountains, one upon another, pressing down from above, set fast at their posts, with the winds buried on every side: then you will be able to recognize their great masses and make out caverns built, as it were, of overhanging rock; when winds have filled these as a storm gets up, they chafe with a great roar at being shut in the clouds, and threaten like wild beasts in cages; now here, now there, they send their growls through the clouds, and seeking a way out they whirl round, and roll together seeds of fire from the clouds, and so drive many together and spin the flame inside the hollow furnaces, until the cloud is torn apart and they flash out gleaming.
6.204	Hac etiam fit uti de causa mobilis ille devolet in terram liquidi color aureus ignis, semina quod nubes ipsas permulta necessust ignis habere; etenim cum sunt umore sine ullo, flammeus [est] plerumque colos et splendidus ollis. quippe etenim solis de lumine multa necessest concipere, ut merito rubeant ignesque profundant. hasce igitur cum ventus agens contrusit in unum compressitque locum cogens, expressa profundunt semina, quae faciunt flammae fulgere colores.	For this reason too it happens that that swift golden color of liquid fire flies down to earth: because the clouds themselves must hold very many seeds of fire; for when they are without any moisture, their color is mostly flame-red and bright. Indeed they must take in many from the light of the sun, so that naturally they glow red and pour out fire. So when the wind, driving, has crammed these

	LATIN	ENGLISH
		into one place and squeezed them hard, they pour out, pressed forth, the seeds that make the colors of flame flash out.
6.214	Fulgit item, cum rarescunt quoque nubila caeli; nam cum ventus eas leviter diducit euntis dissoluitque, cadant ingratius illa necessest semina quae faciunt fulgorem. tum sine taetro terrore atque sonis fulgit nulloque tumultu.	There is lightning, too, when the clouds of the sky thin out; for when the wind gently pulls them apart as they move and dissolves them, there must fall out, against their will, the seeds that make the flash. Then it flashes without hideous terror and sound, and with no uproar.
6.219	Quod superest, [quali] natura praedita constent fulmina, declarant ictus et inusta vaporis signa notaeque gravis halantis sulpuris auras; ignis enim sunt haec non venti signa neque imbris. praeterea saepe accendunt quoque tecta domorum et celeri flamma dominantur in aedibus ipsis. hunc tibi subtilem cum primis ignibus ignem constituit natura minutis mobilibusque corporibus, cui nil omnino obsistere possit. transit enim validum fulmen per saepta domorum clamor ut ac voces, transit per saxa, per aera et liquidum puncto facit aes in tempore et aurum.	As for the rest, the kind of nature with which thunderbolts are endowed is shown by their strokes and the branded marks of heat, and the scars exhaling heavy fumes of sulfur; for these are signs of fire, not of wind or rain. Besides, they often set fire to the roofs of houses too and hold sway with swift flame within the buildings themselves. This fire, you see, subtlest of all fires, nature has made out of tiny and swift-moving bodies, such that nothing at all can stand against it. For the mighty thunderbolt passes through the walls of houses like shouts and voices, passes through stones, through bronze, and in an instant makes bronze and gold run liquid.
	/ curat item vasis integris vina repente diffugiant, quia ni mirum facile omnia circum conlaxat rareque facit lateramina vasis adveniens calor eius et insinuatus in ipsum mobiliter soluens differt primordia vini. quod solis vapor aetatem non posse videtur efficere usque adeo pollens fervore corusco. tanto mobilior vis et dominantior haec est.	/ It likewise makes wine suddenly flee from jars that stay whole, because, no doubt, its heat, arriving, easily loosens all the sides of the jar around and makes them porous, and, slipping into the wine itself, swiftly dissolves and scatters the first beginnings of the wine. This the sun's heat, it seems, could not achieve in an age, for all its mighty strength in flashing glow. So much swifter and more masterful is this force.
6.239	Nunc ea quo pacto gignantur et impete tanto fiant ut possint ictu discludere turris,	Now how these are born, and how they come to have such force

LATIN	ENGLISH
disturbare domos, avellere tigna trabesque et monimenta virum commoliri atque ciere, exanimare homines, pecudes prosternere passim, cetera de genere hoc qua vi facere omnia possint, expediam neque [te] in promissis plura morabor.	that with a stroke they can split towers apart, overturn houses, wrench away timbers and beams, shake and dislodge the monuments of men, strike people dead, lay cattle low on every side— by what force they can do all the rest of this kind— I will explain, and not keep you any longer with promises.
6.246 Fulmina gignier e crassis alteque putandumst nubibus extructis; nam caelo nulla sereno nec leviter densis mittuntur nubibus umquam. nam dubio procul hoc fieri manifesta docet res; quod tunc per totum concrescunt aëra nubes, undique uti tenebras omnis Acherunta reamur liquisse et magnas caeli complesse cavernas, — usque adeo tetra nimborum nocte coorta inpendent atrae formidinis ora superne, — cum commoliri tempestas fulmina coeptat. praeterea persaepe niger quoque per mare nimbus, ut picis e caelo demissum flumen, in undas sic cadit effertus tenebris procul et trahit atram fulminibus gravidam tempestatem atque procellis, ignibus ac ventis cum primis ipse repletus, in terra quoque ut horrescant ac tecta requirant.	We must suppose that thunderbolts are born from thick clouds piled up high; for none are ever sent from a clear sky or from clouds of slight density. Plain fact shows beyond doubt that this is so; for then the clouds thicken throughout the whole air, so that we might think all the darkness had deserted Acheron on every side and filled the great caverns of the sky —so thoroughly, when the foul night of storm clouds has risen, do the faces of black Terror hang over us from above— when the storm begins to set its thunderbolts in motion. Besides, very often a black storm cloud over the sea too, like a river of pitch let down from the sky, falls upon the waves, crammed with darkness, far off, and drags a black storm heavy with thunderbolts and gales, itself filled above all with fires and winds, so that even on land people shudder and seek shelter.
/ sic igitur supera nostrum caput esse putandumst tempestatem altam; neque enim caligine tanta obruerent terras, nisi inaedificata superne multa forent multis exempto nubila sole; nec tanto possent venientes opprimere imbri, flumina abundare ut facerent camposque natare, si non extructis foret alte nubibus aether. hic igitur ventis atque ignibus omnia plena sunt; ideo passim fremitus et fulgura fiunt. quippe etenim supra docui permulta vaporis semina habere cavas nubes et multa necessest concipere ex solis radiis ardoreque eorum.	/ So, then, we must suppose that above our heads the storm towers high; for they would not bury the lands in such gloom unless many clouds were built up above, on many, blotting out the sun; nor could they overwhelm us, when they come, with such rain as to make rivers overflow and fields swim, if the ether were not piled high with clouds. Here, then, all things are full of winds and fires; that is why roars and flashes come on every side. For I showed above that hollow clouds contain very many seeds

	LATIN	ENGLISH
		of heat, and must take in many more from the rays of the sun and their blaze.
	/ hoc ubi ventus eas idem qui cogit in unum forte locum quemvis, expressit multa vaporis semina seque simul cum eo commiscuit igni, insinuatus ibi vortex versatur in arto et calidis acuit fulmen fornacibus intus; nam duplici ratione accenditur: ipse sua cum mobilitate calescit et e contagibus ignis. inde ubi percaluit venti vis [et] gravis ignis impetus incessit, maturum tum quasi fulmen perscindit subito nubem ferturque coruscis omnia luminibus lustrans loca percitus ardor. quem gravis insequitur sonitus, displosa repente opprimere ut caeli videantur templa superne. inde tremor terras graviter pertemptat et altum murmura percurrunt caelum; nam tota fere tum tempestas concussa tremit fremitusque moventur.	/ So when the same wind that drives them together into one place, whatever it may be, has squeezed out many seeds of heat, and has at the same time mixed itself with that fire, the eddy, slipping in there, whirls round in the narrow space and sharpens the thunderbolt in the hot furnaces within; for it is kindled in two ways: it grows hot by its own swiftness, and from contact with the fire. Then, when the force of the wind is thoroughly heated and the heavy onset of fire has come upon it, the thunderbolt, ripe, as it were, suddenly tears through the cloud, and the roused blaze rushes on, lighting up every place with flashing light. Close behind comes a heavy crash, so that, bursting all at once, the realms of the sky seem to crush us from above. Then a trembling runs heavily through the lands, and rumbles race across the high sky; for then almost the whole storm is shaken and shudders, and roarings stir.
	/ quo de concussu sequitur gravis imber et uber, omnis uti videatur in imbrem vertier aether atque ita praecipitans ad diluviem revocare; tantus discidio nubis ventique procella mittitur, ardenti sonitus cum provolat ictu.	/ From this shaking follows heavy and abundant rain, so that the whole ether seems to be turning into rain and, plunging headlong, to be calling the world back to a flood; so much is sent down by the rending of the cloud and the wind's squall, when the crash flies out with the burning stroke.
6.295	Est etiam cum vis extrinsecus incita venti incidit in validam maturo culmine nubem; quam cum perscidit, extemplo cadit igneus ille vertex, quem patrio vocitamus nomine fulmen. hoc fit idem in partis alias, quo cumque tulit vis.	Sometimes, too, the roused force of wind from outside falls on a strong cloud whose summit is ripe; when it has torn through it, at once there falls that fiery whirlwind which in our fathers' tongue we call the thunderbolt. The same happens in other directions, wherever the force has carried it.

	LATIN	ENGLISH
6.300	Fit quoque ut inter dum venti vis missa sine igni igniscat tamen in spatio longoque meatu, dum venit amittens in cursu corpora quaedam grandia, quae nequeunt pariter penetrare per auras, atque alia ex ipso conradens aëre portat parvola, quae faciunt ignem commixta volando; non alia longe ratione ac plumbea saepe fervida fit glans in cursu, cum multa rigoris corpora dimittens ignem concepit in auris.	It also happens at times that the force of wind, sent out without fire, catches fire nonetheless over the distance of its long journey, while it comes, shedding on its way certain bodies that are large and cannot pierce the air as easily, and scraping together others from the air itself, it carries tiny ones, which make fire when mixed together in flight; much in the same way as a leaden sling bullet often grows hot in flight, when, shedding many bodies of cold, it catches fire in the air.
6.309	Fit quoque ut ipsius plagae vis excitet ignem, frigida cum venti pepulit vis missa sine igni, ni mirum quia, cum vehementi perculit ictu, confluere ex ipso possunt elementa vaporis et simul ex illa quae tum res excipit ictum; ut, lapidem ferro cum caedimus, evolat ignis, nec, quod frigida vis ferrist, hoc setius illi semina concurrunt calidi fulgoris ad ictum. sic igitur quoque res accendi fulmine debet, opportuna fuit si forte et idonea flammis. nec temere omnino plane vis frigida venti esse potest, ea quae tanta vi missa supernest, quin, prius in cursu si non accenditur igni, at tepefacta tamen veniat commixta calore.	It also happens that the force of the blow itself strikes up fire, when the cold force of the wind, sent without fire, has struck, no doubt because, when it has struck with a violent stroke, elements of heat can flow together out of the wind itself and also from the thing that then takes the stroke; as when we strike a stone with iron, fire flies out, and though the force of iron is cold, none the less the seeds of hot flashing rush together at the stroke. So, too, a thing must be set on fire by a thunderbolt if it happens to be ready and suited to flame. Nor can the force of the wind really be wholly cold, when it is sent from above with such power, but that, if it is not kindled with fire earlier in its course, it still arrives warmed and mixed with heat.
6.323	Mobilitas autem fit fulminis et gravis ictus et celeri ferme percurrunt fulmina lapsu, nubibus ipsa quod omnino prius incita se vis colligit et magnum conamen sumit eundi, inde ubi non potuit nubes capere inpetis auctum, exprimitur vis atque ideo volat impete miro, ut validis quae de tormentis missa feruntur.	The thunderbolt's speed and heavy stroke come about, and thunderbolts generally race along in a swift glide, because the force itself, roused, first gathers itself entirely in the clouds and builds up a great effort to go; then, when the cloud can no longer hold the growth of its onset, the force is squeezed out and so flies with wondrous speed, like missiles hurled from powerful catapults.

	LATIN	ENGLISH
6.330	Adde quod e parvis et levibus est elementis, nec facilest tali naturae obsistere quicquam; inter enim fugit ac penetrat per rara viarum, non igitur multis offensibus in remorando haesitat, hanc ob rem celeri volat impete labens.	Add that it is made of small and light elements, and it is not easy for anything to stand in the way of such a nature; for it slips between and pierces through the open passages, so it is not held back by many collisions and delayed; for this reason it glides and flies with a swift rush.
6.335	Deinde, quod omnino natura pondera deorsum omnia nituntur, cum plagast addita vero, mobilitas duplicatur et impetus ille gravescit, ut vehementius et citius quae cumque morantur obvia discutiat plagis itinerque sequatur.	Then, since by nature all weights press downward, when a blow is added as well, the speed is doubled and the onset grows heavier, so that it more violently and swiftly scatters with its blows whatever stands in its path to delay it, and follows its route.
6.340	Denique quod longo venit impete, sumere debet mobilitatem etiam atque etiam, quae crescit eundo et validas auget viris et roborat ictum; nam facit ut quae sint illius semina cumque e regione locum quasi in unum cuncta ferantur, omnia coniciens in eum volventia cursum.	Lastly, since it comes with a long rush, it must gain speed again and again, which grows as it goes and increases its mighty strength and toughens its stroke; for it makes all its seeds, whatever they are, move straight ahead, all as it were toward a single place, throwing them all, as they roll, into that one course.
6.346	Forsitan ex ipso veniens trahat aëre quaedam corpora, quae plagis incendunt mobilitatem. incolumisque venit per res atque integra transit multa, foraminibus liquidus quia transviat ignis. multaque perfringit, cum corpora fulminis ipsa corporibus rerum inciderunt, qua texta tenentur. dissoluit porro facile aes aurumque repente conferve facit, e parvis quia facta minute corporibus vis est et levibus ex elementis, quae facile insinuantur et insinuata repente dissoluont nodos omnis et vincla relaxant.	Perhaps, too, as it comes, it draws from the air it- self certain bodies which kindle its speed with their blows. And it passes through things unharmed, and goes through many, leaving them whole, because the flowing fire slips through their pores. And it shatters many, when the very bodies of the thunderbolt have struck the bodies of things where their fabric holds together. Again, it easily melts bronze and in a moment makes gold boil, because its force is finely made of small bodies and of light elements, which easily slip in, and, once slipped in, sud- denly untie all the knots and loosen the bonds.
6.357	Autumnoque magis stellis fulgentibus alta concutitur caeli domus undique totaque tellus, et cum tempora se veris florentia pandunt.	In autumn above all the lofty house of heaven, bright with stars, is shaken on every side, and the whole earth too,

	LATIN	ENGLISH
	frigore enim desunt ignes ventique calore deficiunt neque sunt tam denso corpore nubes. interutrasque igitur cum caeli tempora constant, tum variae causae concurrunt fulminis omnes. nam fretus ipse anni permiscet frigus [ad] aestum. quorum utrumque opus est fabricanda ad fulmina nubi, ut discordia [sit] rerum magnoque tumultu ignibus et ventis furibundus fluctuet aër. prima caloris enim pars est postrema rigoris; tempus id est vernum; quare pugnare necessest dissimilis [res] inter se turbareque mixtas.	and when the flowering season of spring unfolds. For in the cold there is a lack of fires, and in the heat the winds fail, and the clouds are not of so dense a body. So when the seasons of the sky stand between the two, then all the various causes of the thunderbolt converge. For the year's very strait mingles cold with heat, and a cloud needs both to forge thunderbolts, so that there may be discord in things, and with great uproar the air may surge in fury with fires and winds. For the first part of heat is the last of the cold: that is the time of spring; and so it must be that unlike things fight among themselves and, mixed, make turmoil.
	/ et calor extremus primo cum frigore mixtus volvitur, autumni quod fertur nomine tempus, hic quoque confligunt hiemes aestatibus acres. propterea [freta] sunt haec anni nominitanda, nec mirumst, in eo si tempore plurima fiunt fulmina tempestasque cietur turbida caelo, ancipiti quoniam bello turbatur utrimque, hinc flammis, illinc ventis umoreque mixto.	/ And when the last of the heat, mixed with the first of the cold, comes round—the season known by the name of autumn— here too fierce winters clash with summers. That is why these should be called the straits of the year, and it is no wonder if at that season thunderbolts are most frequent and a turbulent storm is stirred up in the sky, since the sky is thrown into turmoil on both sides by a war of doubtful outcome, on one side by flames, on the other by winds and water mixed.

THUNDERBOLTS ARE NOT JUPITER'S

If Jupiter hurled thunderbolts, they would not strike the innocent, empty places and his own temples.

	LATIN	ENGLISH
6.379	Hoc est igniferi naturam fulminis ipsam perspicere et qua vi faciat rem quamque videre, non Tyrrhena retro volventem carmina frustra indicia occultae divum perquirere mentis, unde volans ignis pervenerit aut in utram se verterit hinc partim, quo pacto per loca saepta insinuarit, et hinc dominatus ut extulerit se, quidve nocere queat de caelo fulminis ictus.	This is how to see into the very nature of the fiery thunderbolt and perceive by what force it does each thing— not by unrolling Etruscan scrolls of verse, searching in vain for signs of the gods' hidden will: where the flying fire has come from, or to which side it has turned from there, how through enclosed places it has wormed its way, and how, having lorded it there, it has got out again,

LATIN	ENGLISH
	or what harm the stroke of a thunderbolt from heaven can do.
/ quod si Iuppiter atque alii fulgentia divi terrifico quatiunt sonitu caelestia templa et iaciunt ignem quo cuiquest cumque voluntas, cur quibus incautum scelus aversabile cumquest non faciunt icti flammas ut fulguris halent pectore perfixo, documen mortalibus acre, et potius nulla sibi turpi conscius in re volvitur in flammis innoxius inque peditur turbine caelesti subito correptus et igni? cur etiam loca sola petunt frustraque laborant? an tum bracchia consuescunt firmantque lacertos? in terraque patris cur telum perpetiuntur optundi? cur ipse sinit neque parcit in hostis? denique cur numquam caelo iacit undique puro Iuppiter in terras fulmen sonitusque profundit?	/ But if Jupiter and the other gods shake the shining regions of heaven with a terrifying din and hurl fire wherever each of them pleases, why do they not make those who have committed some reckless, abhorrent crime are struck and breathe out the flames of lightning from a pierced breast—a sharp lesson to mortals— and why instead is one conscious of nothing shameful rolled, innocent, in the flames, and entangled, suddenly caught up in a heavenly whirlwind and fire? Why, too, do they aim at deserted places and labor in vain? Or are they then exercising their arms and building up their muscles? And why do they let their father's weapon be blunted on the ground? Why does he himself allow it, and not save it for his enemies? Lastly, why does Jupiter never hurl a thunderbolt on the earth and pour out his thunder from a sky that is clear on every side?
/ an simul ac nubes successere, ipse in eas tum descendit, prope ut hinc teli determinet ictus? in mare qua porro mittit ratione? quid undas arguit et liquidam molem camposque natantis? praeterea si vult caveamus fulminis ictum, cur dubitat facere ut possimus cernere missum? si nec opinantis autem volt opprimere igni, cur tonat ex illa parte, ut vitare queamus, cur tenebras ante et fremitus et murmura concit? et simul in multas partis qui credere possis mittere? an hoc ausis numquam contendere factum, ut fierent ictus uno sub tempore plures? at saepest numero factum fierique necessest, ut pluere in multis regionibus et cadere imbris, fulmina sic uno fieri sub tempore multa.	/ Or, as soon as clouds have come up, does he climb down into them himself, so as to aim the stroke of his weapon from close at hand? And then, for what reason does he hurl it into the sea? What charge has he against the waves, the liquid mass, the floating plains? Besides, if he wants us to beware the thunderbolt's stroke, why is he reluctant to let us see it when it is hurled? But if he wants to overwhelm us with fire when we are off guard, why does he thunder from that quarter, so that we can avoid it? Why does he stir up darkness beforehand, and roarings and rumblings? And how could you believe that he hurls at once in many directions? Or would you dare to maintain it has never happened that several strokes fell at one and the same time? But it has often happened, and must happen,

	LATIN	ENGLISH
		that just as rain falls and showers come down in many regions, so many thunderbolts occur at one time.
	/ postremo cur sancta deum delubra suasque discutit infesto praeclaras fulmine sedes et bene facta deum frangit simulacra suisque demit imaginibus violento volnere honorem? altaque cur plerumque petit loca plurimaque eius montibus in summis vestigia cernimus ignis?	/ Lastly, why does he shatter the holy shrines of the gods, and his own splendid dwellings, with a hostile thunderbolt, and smash the finely wrought statues of the gods, and rob his own likenesses of their dignity with a violent wound? And why does he mostly aim at high places, and why do we see most traces of his fire on mountain tops?

WATERSPOUTS, CLOUDS AND RAIN

Whirlwinds, clouds, rain and the rainbow all have natural causes.

	LATIN	ENGLISH
6.423	Quod super est, facilest ex his cognoscere rebus, presteras Graii quos ab re nominitarunt, in mare qua missi veniant ratione superne. nam fit ut inter dum tam quam demissa columna in mare de caelo descendat, quam freta circum fervescunt graviter spirantibus incita flabris, et quae cumque in eo tum sint deprensa tumultu navigia in summum veniant vexata periclum.	For the rest, it is easy to understand from these facts how what the Greeks, from their nature, named presteres ("fiery blasts") come down into the sea, sent from above. For it happens that at times something like a column let down from the sky descends into the sea, and around it the waters seethe, stirred up by violently blowing gusts, and whatever ships are caught in that turmoil at the time are tossed about and come into the gravest danger.[3]
	/ hoc fit ubi inter dum non quit vis incita venti rumpere quam coepit nubem, sed deprimit, ut sit in mare de caelo tam quam demissa columna, paulatim, quasi quid pugno bracchique superne coniectu trudatur et extendatur in undas; quam cum discidit, hinc prorumpitur in mare venti vis et fervorem mirum concinnat in undis; versabundus enim turbo descendit et illam deducit pariter lento cum corpore nubem; quam simul ac gravidam detrusit ad aequora ponti, ille in aquam subito totum se inmittit et omne excitat ingenti sonitu mare fervere cogens.	/ This happens when at times the roused force of the wind cannot burst the cloud it has attacked, but presses it down, so that there is something like a column let down from the sky into the sea, little by little, as if something were being thrust from above by a fist and the drive of an arm and stretched out into the waves; and when it has split the cloud, the force of the wind bursts out from it into the sea and whips up an astonishing seething in the waves; for the whirling eddy comes down and draws that cloud down with it, pliant as its body is;

3 Greek prēstēr, from a verb meaning both "to burn" and "to blow": a fiery whirlwind or waterspout.

	LATIN	ENGLISH
		and as soon as it has thrust the cloud, heavy-laden, down to the level of the sea, the eddy suddenly plunges wholly into the water and rouses the whole sea with a huge roar, forcing it to boil.
6.443	Fit quoque ut involvat venti se nubibus ipse vertex conradens ex aëre semina nubis et quasi demissum caelo prestera imitetur; hic ubi se in terras demisit dissoluitque, turbinis immanem vim provomit atque procellae. sed quia fit raro omnino montisque necessest officere in terris, apparet crebrius idem prospectu maris in magno caeloque patenti.	It also happens that the wind's very whirl wraps itself in clouds, scraping together seeds of cloud from the air, and imitates, as it were, a prester let down from the sky; when this has let itself down onto the land and broken up, it spews out a monstrous force of whirlwind and storm. But because this happens rarely at all, and mountains are bound to get in its way on land, the same thing is seen more often over the wide prospect of the sea and under the open sky.
6.451	Nubila concrescunt, ubi corpora multa volando hoc super in caeli spatio coiere repente asperiora, modis quae possint indupedita exiguis tamen inter se compressa teneri. haec faciunt primum parvas consistere nubes; inde ea comprendunt inter se conque gregantur et coniungendo crescunt ventisque feruntur usque adeo donec tempestas saeva coortast.	Clouds form when many bodies, flying in this space of sky above us, have suddenly come together— rougher ones, which, though entangled only slightly, can still be held pressed together. These first make small clouds take shape; then these grip one another and flock together and grow by joining, and are carried by the winds until at last a savage storm has risen.
6.459	Fit quoque uti montis vicina cacumina caelo quam sint quoque magis, tanto magis edita fument adsidue fulvae nubis caligine crassa propterea quia, cum consistunt nubila primum, ante videre oculi quam possint tenvia, venti portantes cogunt ad summa cacumina montis; hic demum fit uti turba maiore coorta et condensa queant apparere et simul ipso vertice de montis videantur surgere in aethram. nam loca declarat sursum ventosa patere res ipsa et sensus, montis cum ascendimus altos.	It happens too that mountain peaks, the nearer they neighbor the sky, the more they smoke, towering, continually with the thick murk of tawny cloud, because, when clouds first form, before the eyes can see them, thin as they are, the winds carry them and drive them together to the mountain's highest peaks; only there does it happen that, once a greater throng has gathered, they can be seen condensed, and seem at the same time to rise from the very summit of the mountain into the upper air. For that high places lie open to the winds is made plain by the fact itself and by our senses, when we climb high mountains.

	LATIN	ENGLISH
6.470	Praeterea permulta mari quoque tollere toto corpora naturam declarant litore vestis suspensae, cum concipiunt umoris adhaesum. quo magis ad nubis augendas multa videntur posse quoque e salso consurgere momine ponti; nam ratio consanguineast umoribus omnis.	Besides, that nature lifts very many bodies from the whole sea too is shown by clothes hung up on the shore, when they take in a clinging moisture. So it seems all the more that many bodies, to swell the clouds, can also rise from the salt surge of the sea; for all moistures are akin in their nature.
6.476	Praeterea fluviis ex omnibus et simul ipsa surgere de terra nebulas aestumque videmus, quae vel ut halitus hinc ita sursum expressa feruntur suffunduntque sua caelum caligine et altas sufficiunt nubis paulatim conveniundo; urget enim quoque signiferi super aetheris aestus et quasi densendo subtexit caerula nimbis.	Besides, from all the rivers, and at the same time from the earth itself, we see mists and steam rise up, which, like breath, are pressed out from there and carried upward and overspread the sky with their murk and, little by little, by coming together, furnish the high clouds; for the heat of the star-signed ether above bears down on them too and, as if by thickening them, weaves a veil of rain-clouds under the blue.
6.483	Fit quoque ut hunc veniant in caelum extrinsecus illa corpora quae faciunt nubis nimbosque volantis; innumerabilem enim numerum summamque profundi esse infinitam docui, quantaque volarent corpora mobilitate ostendi quamque repente immemorabile [per] spatium transire solerent. haut igitur mirumst, si parvo tempore saepe tam magnis ventis tempestas atque tenebrae coperiant maria ac terras inpensa superne, undique quandoquidem per caulas aetheris omnis et quasi per magni circum spiracula mundi exitus introitusque elementis redditus extat.	It happens too that into this sky of ours, from outside, come those bodies that make clouds and flying storm-clouds; for I have taught that their number is countless, and the sum of the deep infinite, and I have shown with what great speed bodies fly, and how in an instant they commonly travel through untold space. So it is no wonder if often in a short time storm and darkness, with winds so great, cover seas and lands, looming overhead, since on all sides, through all the pores of the ether and, as it were, through the breathing-holes of the great world around, a way out and a way in stands open to the elements.
6.495	Nunc age, quo pacto pluvius concrescat in altis nubibus umor et in terras demissus ut imber decidat, expediam. primum iam semina aquai multa simul vincam consurgere nubibus ipsis omnibus ex rebus pariterque ita crescere utrumque et nubis et aquam, quae cumque in nubibus extat, ut pariter nobis corpus cum sanguine crescit, sudor item atque umor qui cumque est denique membris. concipiunt etiam multum quoque saepe marinum umorem, vel uti pendentia vellera lanae,	Now come, how the rain-water condenses in the high clouds, and how, let down on the earth as a shower, it falls, I will explain. First, then, I will prove that many seeds of water rise together with the clouds themselves from all things, and that both grow alike in this way— the clouds and the water, whatever there is in the

	LATIN	ENGLISH
	cum supera magnum mare venti nubila portant. consimili ratione ex omnibus amnibus umor tollitur in nubis.	clouds— just as our body grows together with the blood, and so does sweat, and in short whatever moisture there is in the limbs. They also often take in a great deal of sea moisture, like hanging fleeces of wool, when the winds carry clouds over the great sea. In the same way moisture is raised from all the rivers into the clouds.
	quo cum bene semina aquarum multa modis multis convenere undique adaucta, confertae nubes umorem mittere certant dupliciter; nam vis venti contrudit et ipsa copia nimborum turba maiore coacta urget et e supero premit ac facit effluere imbris. praeterea cum rarescunt quoque nubila ventis aut dissolvuntur solis super icta calore, mittunt umorem pluvium stillantque, quasi igni cera super calido tabescens multa liquescat. sed vehemens imber fit, ubi vehementer utraque nubila vi cumulata premuntur et impete venti. at retinere diu pluviae longumque morari consuerunt, ubi multa cientur semina aquarum atque aliis aliae nubes nimbique rigantes insuper atque omni vulgo de parte feruntur, terraque cum fumans umorem tota redhalat.	And when seeds of water have duly gathered there, many of them, in many ways, swollen from every side, the crowded clouds strive to discharge their mois- ture in two ways; for the force of the wind thrusts them together, and the very mass of the rain-clouds, driven together in a great- er throng, presses and bears down from above and makes the showers stream out. Besides, when the clouds are thinned by the winds too, or broken up, struck from above by the sun's heat, they let fall their rain and drip, as wax over a hot fire melts and flows away in plenty. But a violent rain comes when, violently, by both forces the clouds are pressed—by their own heaped-up mass and by the thrust of the wind. But rains are wont to hold on long and to linger long, when many seeds of water are stirred up, and clouds upon clouds and drenching rain-clouds are borne along above them and from every side, and the whole earth, steaming, breathes its mois- ture back.
	/ hic ubi sol radiis tempestatem inter opacam adversa fulsit nimborum aspargine contra, tum color in nigris existit nubibus arqui.	/ Here, when the sun with its rays amid the dark storm shines straight into the spray of the rain-clouds fa- cing it, then the color of the rainbow appears in the black clouds.
6.527	Cetera quae sursum crescunt sursumque creantur, et quae concrescunt in nubibus, omnia, prorsum omnia, nix venti grando gelidaeque pruinae et vis magna geli, magnum duramen aquarum, et mora quae fluvios passim refrenat aventis, perfacilest tamen haec reperire animoque videre,	All the other things that grow up above and are created above, and that form in the clouds—all of them, abso- lutely all: snow, winds, hail and chill hoarfrost,

	LATIN	ENGLISH
	omnia quo pacto fiant quareve creentur, cum bene cognoris elementis reddita quae sint.	and the great force of ice, the great hardening of waters, the check that everywhere reins in eager rivers— it is still very easy to find these out and to see with the mind how they all come about and why they are created, once you have well understood what properties belong to the elements.

EARTHQUAKES

Collapsing caverns, underground waters and trapped winds shake the earth and topple cities.

	LATIN	ENGLISH
6.535	Nunc age, quae ratio terrai motibus extet percipe. et in primis terram fac ut esse rearis supter item ut supera ventosis undique plenam speluncis multosque lacus multasque lucunas in gremio gerere et rupes deruptaque saxa; multaque sub tergo terrai flumina tecta volvere vi fluctus summersos [cae]ca putandumst; undique enim similem esse sui res postulat ipsa. his igitur rebus subiunctis suppositisque terra superne tremit magnis concussa ruinis, subter ubi ingentis speluncas subruit aetas; quippe cadunt toti montes magnoque repente concussu late disserpunt inde tremores. et merito, quoniam plaustris concussa tremescunt tecta viam propter non magno pondere tota, nec minus exultant, si quidvis cumque viai ferratos utrimque rotarum succutit orbes.	Now come, learn the explanation for the movements of the earth. And first of all be sure to think of the earth as being, below as above, full on every side of windy caverns, and as carrying many lakes and many pools in its bosom, and crags and sheer rocks; and we must suppose that many rivers, covered beneath the earth's back, roll, blind, their sunken waves with force; for the thing itself demands that it be like itself throughout. With these things, then, joined beneath it and set under it, the earth trembles above, shaken by great collapses, when age has undermined huge caverns below; for whole mountains fall, and from the great, sudden shock tremors creep out far and wide. And no wonder, since, shaken by wagons, whole houses beside the road tremble, from no great weight, and they jump no less if any bump in the road jolts the iron-rimmed circles of the wheels on either side.
6.552	Fit quoque, ubi in magnas aquae vastasque lucunas gleba vetustate e terra provolvitur ingens, ut iactetur aquae fluctu quoque terra vacillans; ut vas inter [aquas] non quit constare, nisi umor destitit in dubio fluctu iactarier intus.	It happens too, when into great, vast pools of water a huge clod, loosened by age, rolls down from the land, that the earth too is tossed and sways with the water's wave,

	LATIN	ENGLISH
		just as a vessel cannot stand steady in water unless the liquid within has stopped being tossed in an unsteady swell.
6.557	Praeterea ventus cum per loca subcava terrae collectus parte ex una procumbit et urget obnixus magnis speluncas viribus altas, incumbit tellus quo venti prona premit vis. tum supera terram quae sunt extructa domorum ad caelumque magis quanto sunt edita quaeque, inclinata minent in eandem prodita partem protractaeque trabes inpendent ire paratae. et metuunt magni naturam credere mundi exitiale aliquod tempus clademque manere, cum videant tantam terrarum incumbere molem!	Besides, when wind through hollow places of the earth has gathered and leans forward from one side and presses, straining with great force, against the deep caverns, the earth leans over where the wind's force bears down headlong. Then the buildings raised up on the earth, and the more so the higher each one towers toward the sky, lean over and threaten, pitched forward to the same side, and the beams, thrust out, hang ready to go. And yet people are afraid to believe that for the nature of the great world some deadly time of ruin and disaster lies in wait, even when they see so vast a mass of earth leaning over!
	/ quod nisi respirent venti, [vis] nulla refrenet res neque ab exitio possit reprehendere euntis; nunc quia respirant alternis inque gravescunt et quasi collecti redeunt ceduntque repulsi, saepius hanc ob rem minitatur terra ruinas quam facit; inclinatur enim retroque recellit et recipit prolapsa suas in pondere sedes. hac igitur ratione vacillant omnia tecta, summa magis mediis, media imis, ima perhilum.	/ But if the winds did not pause for breath, no force could rein in things or pull them back from ruin as they went; as it is, because they pause for breath by turns and grow heavier, and, as it were, gather and return and then fall back repulsed, for this reason the earth more often threatens collapse than causes it; for it leans over and springs back again, and, having slipped forward, recovers its seat under its weight. This, then, is why all buildings sway, the top more than the middle, the middle more than the lowest, the lowest very little.
6.577	Est haec eiusdem quoque magni causa tremoris. ventus ubi atque animae subito vis maxima quaedam aut extrinsecus aut ipsa tellure coorta in loca se cava terrai coniecit ibique speluncas inter magnas fremit ante tumultu versabunda〈QUE〉 portatur, post incita cum vis exagitata foras erumpitur et simul altam diffindens terram magnum concinnat hiatum. in Syria Sidone quod accidit et fuit Aegi	This is also the cause of that same great trembling: when wind and some sudden, very great force of air, arising either from outside or from the earth itself, has hurled itself into the hollow places of the earth, and there first roars in uproar among the huge caverns and is carried whirling along, then, when its force, roused

LATIN	ENGLISH
in Peloponneso, quas exitus hic animai disturbat urbes et terrae motus obortus. multaque praeterea ceciderunt moenia magnis motibus in terris et multae per mare pessum subsedere suis pariter cum civibus urbes.	and driven wild, bursts outward and at the same time, splitting the deep earth, forms a great chasm. This is what happened at Sidon in Syria, and it happened at Aegium in the Peloponnese—cities that such an outbreak of air and the earthquake that arose overthrew. And many other walls have fallen in great quakes on land, and many cities have sunk down through the sea to the bottom together with their citizens.[4]
/ quod nisi prorumpit, tamen impetus ipse animai et fera vis venti per crebra foramina terrae dispertitur ut horror et incutit inde tremorem; frigus uti nostros penitus cum venit in artus, concutit invitos cogens tremere atque movere. ancipiti trepidant igitur terrore per urbis, tecta superne timent, metuunt inferne cavernas terrai ne dissoluat natura repente, neu distracta suum late dispandat hiatum idque suis confusa velit complere ruinis.	/ But if it does not burst out, still the very onrush of air and the fierce force of wind is spread through the earth's many openings like a shudder, and so sets up a tremor, as when cold comes deep into our limbs and shakes them against their will, forcing them to shiver and move. So people in the cities quake with a double terror: they fear the roofs above, they dread the caverns below, lest the earth's nature suddenly break them open, or, torn apart, spread its chasm wide and, in confusion, seek to fill it with its own ruins.
/ proinde licet quamvis caelum terramque reantur incorrupta fore aeternae mandata saluti: et tamen inter dum praesens vis ipsa pericli subdit et hunc stimulum quadam de parte timoris, ne pedibus raptim tellus subtracta feratur in barathrum rerumque sequatur prodita summa funditus et fiat mundi confusa ruina. ... Principio mare mirantur non reddere maius naturam, quo sit tantus decursus aquarum, omnia quo veniant ex omni flumina parte. adde vagos imbris tempestatesque volantes, omnia quae maria ac terras sparguntque rigantque; adde suos fontis; tamen ad maris omnia summam guttai vix instar erunt unius adaugmen; quo minus est mirum mare non augescere magnum.	/ So however much they may believe that heaven and earth will be imperishable, entrusted to everlasting safety, yet at times the very presence of danger applies, from some quarter, this goad of fear as well: lest the earth be snatched suddenly from under their feet and carried into the abyss, and the sum of things, abandoned, follow utterly, and the world become a confused wreck. ... First of all, people wonder that nature does not render the sea larger, when there is such a downrush of waters, when all rivers come to it from every side. Add the wandering showers and the flying storms that sprinkle and drench all seas and lands; add its own springs; yet all these, compared with

4 Sidon was the Phoenician port city; Aegium, on the Gulf of Corinth, was struck by the earthquake of 373 BC that also sank nearby Helice into the sea.

	LATIN	ENGLISH
		the whole sea, will scarcely equal the increase of a single drop; so it is less of a wonder that the great sea does not grow.
6.616	Praeterea magnam sol partem detrahit aestu. quippe videmus enim vestis umore madentis exsiccare suis radiis ardentibus solem; at pelage multa et late substrata videmus. proinde licet quamvis ex uno quoque loco sol umoris parvam delibet ab aequore partem, largiter in tanto spatio tamen auferet undis.	Besides, the sun draws off a great part with its heat. For we see clothes dripping with moisture dried out by the sun with its burning rays; and we see many seas spread out far and wide beneath. So though from each single place the sun may sip only a small part of moisture from the sea's surface, over so vast a space it will still take away much from the waves.
6.623	Tum porro venti quoque magnam tollere partem umoris possunt verrentes aequora, ventis una nocte vias quoniam persaepe videmus siccari mollisque luti concrescere crustas.	Then again, winds too can lift off a great part of the moisture as they sweep the seas, since very often we see roads dried by the winds in a single night and crusts of soft mud harden.
6.627	Praeterea docui multum quoque tollere nubes umorem magno conceptum ex aequore ponti et passim toto terrarum spargere in orbi, cum pluit in terris et venti nubila portant.	Besides, I have taught that clouds too lift up much moisture, taken up from the great surface of the sea, and scatter it everywhere over the whole round of the earth, when it rains on land and the winds carry the clouds.
6.631	Postremo quoniam raro cum corpore tellus est et coniunctast oras maris undique cingens, debet, ut in mare de terris venit umor aquai, in terras itidem manare ex aequore salso; percolatur enim virus retroque remanat materies umoris et ad caput amnibus omnis confluit, inde super terras redit agmine dulci qua via secta semel liquido pede detulit undas.	Lastly, since the earth is loose in body and is joined to the sea, girding its shores on every side, then, just as the water's moisture comes from the land into the sea, it must likewise seep into the land from the salt sea; for the brine is strained out, and the matter of the moisture seeps back and all flows together at the rivers' source, and from there returns over the lands in a fresh column wherever a channel, once cut, has carried down the waves on liquid foot.

ETNA AND OTHER WONDERS

Volcanoes, the Nile's summer flood, deadly Avernian places and strange springs are explained.

	LATIN	ENGLISH
6.639	Nunc ratio quae sit, per fauces montis ut Aetnae expirent ignes inter dum turbine tanto, expediam; neque enim mediocri clade coorta flammae tempestas Siculum dominata per agros finitimis ad se convertit gentibus ora, fumida cum caeli scintillare omnia templa cernentes pavida complebant pectora cura, quid moliretur rerum natura novarum.	Now what the reason is that, through the jaws of Mount Etna, fires sometimes breathe out in so great a whirlwind, I will explain; for it was with no ordinary destruction that the storm of flame arose and held sway over the fields of the Sicilians and turned the eyes of neighboring peoples toward itself, when, seeing all the regions of the sky smoking and sparkling, they filled their hearts with anxious fear of what new upheaval nature was contriving.
6.647	Hisce tibi in rebus latest alteque videndum et longe cunctas in partis dispiciendum, ut reminiscaris summam rerum esse profundam et videas caelum summai totius unum quam sit parvula pars et quam multesima constet nec tota pars, homo terrai quota totius unus. quod bene propositum si plane contueare ac videas plane, mirari multa relinquas. numquis enim nostrum miratur, siquis in artus accepit calido febrim fervore coortam aut alium quemvis morbi per membra dolorem?	In these matters you must look widely and deeply and gaze far out in every direction, so as to recall that the sum of things is bottomless, and to see how tiny a part of the whole sum one heaven is, and how minute a fraction it makes up— not even so much as one man is of the whole earth. If you set this well before you and gaze on it plainly and see it plainly, you would give up wondering at many things. For does any of us wonder if someone has caught in his limbs a fever that has sprung up with burning heat, or any other pain of disease throughout his body?
	/ opturgescit enim subito pes, arripit acer saepe dolor dentes, oculos invadit in ipsos, existit sacer ignis et urit corpore serpens quam cumque arripuit partem repitque per artus, ni mirum quia sunt multarum semina rerum et satis haec tellus morbi caelumque mali fert, unde queat vis immensi procrescere morbi. sic igitur toti caelo terraeque putandumst ex infinito satis omnia suppeditare, unde repente queat tellus concussa moveri perque mare ac terras rapidus percurrere turbo, ignis abundare Aetnaeus, flammescere caelum; id quoque enim fit et ardescunt caelestia templa et tempestates pluviae graviore coortu sunt, ubi forte ita se tetulerunt semina aquarum.	/ A foot suddenly swells up; sharp pain often seizes the teeth, invades the very eyes; the sacred fire breaks out and, creeping over the body, burns whatever part it has seized, and crawls through the limbs— no wonder, since there are seeds of many things, and this earth and sky bring forth enough disease and harm for the force of measureless disease to grow up from them. In just this way, then, we must suppose that to the whole of heaven and earth enough of everything is supplied out of the infin-

	LATIN	ENGLISH
		ite for the earth suddenly to be shaken and moved, for a rushing whirlwind to sweep over sea and land, for Etna's fire to overflow, and the sky to burst into flame; for that happens too, and the regions of heaven catch fire, and rainstorms arise with a heavier onset when the seeds of water have chanced to come together so.[5]
	/ 'at nimis est ingens incendi turbidus ardor.' scilicet et fluvius qui visus maximus ei, qui non ante aliquem maiorem vidit, et ingens arbor homoque videtur et omnia de genere omni maxima quae vidit quisque, haec ingentia fingit, cum tamen omnia cum caelo terraque marique nil sint ad summam summai totius omnem.	/ "But the turbulent blaze of the fire is far too huge." Of course—and a river seems the greatest to someone who has never seen a greater before; and huge a tree and a man appear, and in every kind of thing whatever is the greatest each has seen, he pictures as huge, though all things together, with sky and land and sea, are nothing compared with the whole sum of the entire sum.
6.680	Nunc tamen illa modis quibus inritata repente flamma foras vastis Aetnae fornacibus efflet, expediam. primum totius subcava montis est natura fere silicum suffulta cavernis. omnibus est porro in speluncis ventus et aër. ventus enim fit, ubi est agitando percitus aër. hic ubi percaluit cale fecitque omnia circum saxa furens, qua contingit, terramque et ab ollis excussit calidum flammis velocibus ignem, tollit se ac rectis ita faucibus eicit alte. fert itaque ardorem longe longeque favillam differt et crassa volvit caligine fumum extruditque simul mirando pondere saxa; ne dubites quin haec animai turbida sit vis. praeterea magna ex parti mare montis ad eius radices frangit fluctus aestumque resolvit.	Now, though, the ways in which that flame, suddenly roused, blasts out from the vast furnaces of Etna I will explain. First, the whole mountain is hollow beneath in its nature, propped up for the most part on caverns of flint. Moreover, in all its caves there is wind and air. For wind arises when air is stirred and set in motion. When this has grown thoroughly hot and in its fury has heated all the surrounding rocks where it touches them, and the earth, and has struck from them a fire hot with swift flames, it rises and so hurls itself high out through the straight jaws. So it carries its heat far, and far and wide scatters the ash, and rolls up smoke in thick murk, and at the same time thrusts out rocks of astonishing weight; so you need not doubt that this is the turbulent force of air.

5 The "sacred fire" is an inflammatory skin disease, perhaps erysipelas or shingles.

	LATIN	ENGLISH
		Besides, along a great part of the mountain the sea breaks its waves at its roots and draws back its surge.
	/ ex hoc usque mari speluncae montis ad altas perveniunt subter fauces. hac ire fatendumst ... et penetrare mari penitus res cogit aperto atque efflare foras ideoque extollere flammam saxaque subiectare et arenae tollere nimbos. in summo sunt vertice enim crateres, ut ipsi nominitant, nos quod fauces perhibemus et ora.	/ From this sea caves run underground right up to the mountain's high jaws. By this path, we must admit, there goes ... and the facts compel us to see that it penetrates deep from the open sea and blows out, and so lifts up flame, and hurls up rocks and raises clouds of sand. For on the very summit there are crateres ("bowls"), as the people there call them—what we call jaws and mouths.
6.703	Sunt aliquot quoque res quarum unam dicere causam non satis est, verum pluris, unde una tamen sit; corpus ut exanimum siquod procul ipse iacere conspicias hominis, fit ut omnis dicere causas conveniat leti, dicatur ut illius una; nam [ne]que eum ferro nec frigore vincere possis interiisse neque a morbo neque forte veneno, verum aliquid genere esse ex hoc quod contigit ei scimus. item in multis hoc rebus dicere habemus.	There are also some things for which to state one cause is not enough—rather several, one of which, however, is the true one; just as, if you yourself should see the lifeless body of a man lying some way off, it would be fitting to name all the causes of death, so that the one cause of his death may be named; for you could not prove that he died either by the sword or by cold, or from disease, or perhaps by poison, but we know that what befell him is something of this kind. In the same way we have to say this in many cases.
6.712	Nilus in aestatem crescit campisque redundat unicus in terris, Aegypti totius amnis. is rigat Aegyptum medium per saepe calorem, aut quia sunt aestate aquilones ostia contra, anni tempore eo, qui etesiae esse feruntur, et contra fluvium flantes remorantur et undas cogentes sursus replent coguntque manere. nam dubio procul haec adverso flabra feruntur flumine, quae gelidis ab stellis axis aguntur; ille ex aestifera parti venit amnis ab austro inter nigra virum percocto saecla colore exoriens penitus media ab regione diei.	The Nile rises toward summer and overflows the plains, unique on earth, the river of all Egypt. It waters Egypt, often in the midst of the heat, either because in summer the north winds blow against its mouths at that time of year when they are said to be the Etesians, and, blowing against the stream, hold it back, and, forcing the waters upstream, fill it and make it stand still. For beyond doubt these blasts are borne against the current of the river, driven as they are from the chill stars of the pole; that river comes from the heat-bearing quarter, from the south, among races of men whose skin the sun has baked

LATIN	ENGLISH
	dark, rising deep within the region of midday.
/ est quoque uti possit magnus congestus harenae fluctibus adversis oppilare ostia contra, cum mare permotum ventis ruit intus harenam; quo fit uti pacto liber minus exitus amnis et proclivis item fiat minus impetus undis. fit quoque uti pluviae forsan magis ad caput ei tempore eo fiant, quo etesia flabra aquilonum nubila coniciunt in eas tunc omnia partis. scilicet, ad mediam regionem eiecta diei cum convenerunt, ibi ad altos denique montis contrusae nubes coguntur vique premuntur. forsitan Aethiopum penitus de montibus altis crescat, ubi in campos albas descendere ningues tabificis subigit radiis sol omnia lustrans.	/ It may also be that a great heap of sand blocks up the mouths, set against the opposing waves, when the sea, churned by the winds, drives the sand inland; by which means the river's outlet becomes less free and the downhill rush of its waters likewise less. It may be, too, that more rain falls at its source at that season, when the Etesian blasts of the north winds drive all the clouds into those regions. That is, when, driven out to the region of midday, they have gathered, there at last against high mountains the clouds are thrust, packed together and pressed by force. Perhaps it swells from deep within, from the high mountains of the Ethiopians, where the white snows are made to come down into the plains by the melting rays of the sun that surveys all things.
6.738 Nunc age, Averna tibi quae sint loca cumque lacusque, expediam, quali natura praedita constent. principio, quod Averna vocantur nomine, id ab re inpositumst, quia sunt avibus contraria cunctis, e regione ea quod loca cum venere volantes, remigii oblitae pennarum vela remittunt praecipitesque cadunt molli cervice profusae in terram, si forte ita fert natura locorum, aut in aquam, si forte lacus substratus Averni. is locus est Cumas aput, acri sulpure montis oppleti calidis ubi fumant fontibus aucti.	Now come, as for any places and lakes that are Avernian, I will explain to you with what nature they are endowed. First, the name by which they are called, Avernian, was given from the thing itself, because they are hostile to all birds, since, when they have come flying over those regions, they forget the oarage of their wings, let their sails go slack, and fall headlong, their necks limp and drooping, to the ground, if the nature of the place so happens to have it, or into the water, if a lake of Avernus lies spread beneath. Such a place is near Cumae, where mountains, filled with acrid sulfur, smoke, enriched with hot springs.[6]
/ est et Athenaeis in moenibus, arcis in ipso vertice, Palladis ad templum Tritonidis almae,	/ There is one too within the walls of Athens, on the very summit

	LATIN	ENGLISH
	quo numquam pennis appellunt corpora raucae cornices, non cum fumant altaria donis; usque adeo fugitant non iras Palladis acris pervigili causa, Graium ut cecinere poëtae, sed natura loci opus efficit ipsa suapte. in Syria quoque fertur item locus esse videri, quadripedes quoque quo simul ac vestigia primum intulerint, graviter vis cogat concidere ipsa, manibus ut si sint divis mactata repente.	of the citadel, by the temple of kindly Pallas Tritonis, where hoarse crows never steer their bodies on their wings, not even when the altars smoke with offerings; so constantly do they avoid it—shunning not the fierce anger of Pallas for their watchfulness, as the poets of the Greeks have sung, but the nature of the place itself does the work by its own power. In Syria too, it is said, there is a place to be seen where, as soon as even four-footed beasts have first set foot in it, its very force makes them fall down heavily, as if they had suddenly been sacrificed to the gods of the dead.[7]
	/ omnia quae naturali ratione geruntur, et quibus e fiant causis apparet origo; ianua ne pote eis Orci regionibus esse credatur, post hinc animas Acheruntis in oras ducere forte deos manis inferne reamur, naribus alipedes ut cervi saepe putantur ducere de latebris serpentia saecla ferarum. quod procul a vera quam sit ratione repulsum percipe; nam de re nunc ipsa dicere conor.	/ All these things take place by a natural process, and it is plain from what causes they have their origin; so let no one believe that the gate of Orcus can be in these regions, nor let us think that from here, perhaps, spirits are led by the gods of the dead below to the shores of Acheron, as wing-footed stags are often believed to draw with their nostrils the creeping races of wild creatures from their lairs. How far this is removed from true reasoning, learn; for now I am trying to speak of the thing itself.
6.769	Principio hoc dico, quod dixi saepe quoque ante, in terra cuiusque modi rerum esse figuras; multa, cibo quae sunt, vitalia multaque, morbos incutere et mortem quae possint adcelerare. et magis esse aliis alias animantibus aptas res ad vitai rationem ostendimus ante propter dissimilem naturam dissimilisque texturas inter sese primasque figuras. multa meant inimica per auris, multa per ipsas insinuant naris infesta atque aspera tactu, nec sunt multa parum tactu vitanda neque autem aspectu fugienda saporeque tristia quae sint.	First I say this, as I have often said before: there are in the earth shapes of things of every kind; many, which serve as food, are life-giving, and many can bring on diseases and hasten death. And that different things are better suited to different creatures for the business of life we have shown before, because of their unlike nature and unlike textures and first shapes, differing from one an-

6 The name was taken as Greek aornos, "birdless"; Lake Avernus, near Cumae on the Bay of Naples, was held to be an entrance to the underworld.
7 Pallas Tritonis is Athena; in myth she banished the crow from the Acropolis after it brought her unwelcome news it had seen while keeping watch.

LATIN	ENGLISH
	other. Many hostile things travel through the ears, many make their way in through the nostrils themselves, harmful and harsh to the touch, and not a few must be shunned by touch, or else fled from by sight, or are bitter in taste.
6.781 Deinde videre licet quam multae sint homini res acriter infesto sensu spurcaeque gravisque; arboribus primum certis gravis umbra tributa usque adeo, capitis faciant ut saepe dolores, siquis eas subter iacuit prostratus in herbis. est etiam magnis Heliconis montibus arbos floris odore hominem taetro consueta necare. scilicet haec ideo terris ex omnia surgunt, multa modis multis multarum semina rerum quod permixta gerit tellus discretaque tradit. nocturnumque recens extinctum lumen ubi acri nidore offendit nares, consopit ibidem, concidere et spumas qui morbo mittere suevit. castoreoque gravi mulier sopita recumbit, et manibus nitidum teneris opus effluit ei, tempore eo si odoratast quo menstrua solvit.	Next, you can see how many things there are that to humans are sharply hostile to the senses, foul and oppressive. First, certain trees have been given a shade so oppressive that they often bring on headaches if someone has lain stretched out on the grass beneath them. There is even a tree on the great mountains of Helicon that is known to kill a man with the foul smell of its flower. Clearly, all these things rise from the ground for this reason: the earth holds many seeds of many things, in many ways mixed together, and hands them out separately. And a night-lamp just put out, when with its sharp reek it strikes the nostrils, puts to sleep there and then anyone prone to fall down and foam at the mouth from illness. And a woman sinks back, put to sleep by heavy castoreum, and the fine work slips from her delicate hands, if she has smelled it at the time of her monthly period.
/ multaque praeterea languentia membra per artus solvunt atque animam labefactant sedibus intus. denique si calidis etiam cunctere lavabris plenior et lueris, solio ferventis aquai quam facile in medio fit uti des saepe ruinas! carbonumque gravis vis atque odor insinuatur quam facile in cerebrum, nisi aqua praecepimus ante! at cum membra domans percepit fervida febris, tum fit odor vini plagae mactabilis instar. nonne vides etiam terra quoque sulpur in ipsa gignier et taetro concrescere odore bitumen, denique ubi argenti venas aurique secuntur, terrai penitus scrutantes abdita ferro, qualis expiret Scaptensula subter odores?	/ Many other things besides loosen the drooping limbs through the joints and make the spirit totter in its seat within. Then again, if you linger in hot baths when overfull, and bathe, how easily it happens that you often collapse in the middle of a tub of scalding water! And the heavy force and smell of charcoal—how easily it seeps into the brain, unless we have taken water first! But when a burning fever has seized the limbs and is mastering them, then the smell of wine is like a killing blow. Do you not see, too, that in the earth itself sulfur

	LATIN	ENGLISH
	quidve mali fit ut exalent aurata metalla! quas hominum reddunt facies qualisque colores!	is produced, and bitumen hardens with its foul smell; and lastly, where men follow veins of silver and gold, probing with iron deep into earth's hidden places, what smells Scaptensula breathes out from below? And what harm the gold mines exhale! What faces, what complexions they give to men![8]
	/ nonne vides audisve perire in tempore parvo quam soleant et quam vitai copia desit, quos opere in tali cohibet vis magna necessis? hos igitur tellus omnis exaestuat aestus expiratque foras in apertum promptaque caeli.	/ Do you not see or hear how soon they usually die, and how their stock of life runs short— those whom the great force of necessity confines to such work? All these exhalations, then, the earth seethes out and breathes forth into the open, into the unguarded spaces of the sky.
6.818	Sic et Averna loca alitibus summittere debent mortiferam vim. de terra quae surgit in auras, ut spatium caeli quadam de parte venenet; quo simul ac primum pennis delata sit ales, impediatur ibi caeco correpta veneno, ut cadat e regione loci, qua derigit aestus. quo cum conruit, hic eadem vis illius aestus reliquias vitae membris ex omnibus aufert. quippe etenim primo quasi quendam conciet aestum; posterius fit uti. cum iam cecidere veneni in fontis ipsos, ibi sit quoque vita vomenda, propterea quod magna mali fit copia circum.	So too the places of Avernus must send up for birds a deadly force that rises from the earth into the air, so as to poison the space of the sky in some quarter; and as soon as a bird has been carried there on its wings, it is hampered there, seized by the unseen poison, so that it falls straight down at the spot where the exhalation directs it. When it has crashed down there, the same force of that exhalation takes the remnants of life from all its limbs. For at first it stirs up a kind of giddy seething; afterward it happens that, once they have fallen into the very sources of the poison, there they must also spew out their life, because there is a great store of evil all around.
6.830	Fit quoque ut inter dum vis haec atque aestus Averni aëra, qui inter avis cumquest terramque locatus. discutiat, prope uti locus hic linquatur inanis. cuius ubi e regione loci venere volantis, claudicat extemplo pinnarum nisus inanis et conamen utrimque alarum proditur omne. hic ubi nixari nequeunt insistereque alis, scilicet in terram delabi pondere cogit natura, et vacuum prope iam per inane iacentes dispergunt animas per caulas corporis omnis. ...	It also happens at times that this force and exhalation of Avernus scatters the air that lies between the birds and the earth, so that the place there is left almost empty. When they come flying straight over this spot, at once the effort of their feathers limps, useless, and all the striving of their wings on either side is betrayed. Here, when they cannot lean their weight or rest upon their wings,

8 Scaptensula (Scapte Hyle) was a mining district in Thrace, rich in gold and silver.

	LATIN	ENGLISH
	frigidior porro in puteis aestate fit umor, arescit quia terra calore et semina si qua forte vaporis habet proprie, dimittit in auras. quo magis est igitur tellus effeta calore, fit quoque frigidior qui in terrast abditus umor.	nature, of course, forces them by their weight to sink down to earth, and lying now in what is nearly empty void, they scatter their spirits through all the pores of the body. ... Then again, water in wells grows colder in summer, because the earth is parched by heat, and any seeds of heat it happens to have of its own, it lets go into the air. So the more the ground is exhausted by heat, the colder too becomes the water hidden in the earth.
	/ frigore cum premitur porro omnis terra coitque et quasi concrescit, fit scilicet ut coeundo exprimat in puteos si quem gerit ipsa calorem.	/ Then again, when all the earth is pressed by cold and contracts and, as it were, congeals, it happens, of course, that in contracting it squeezes out into the wells whatever heat it holds.
6.848	Esse apud Hammonis fanum fons luce diurna frigidus et calidus nocturno tempore fertur. hunc homines fontem nimis admirantur et acri sole putant subter terras fervescere partim, nox ubi terribili terras caligine texit. quod nimis a verast longe ratione remotum. quippe ubi sol nudum contractans corpus aquai non quierit calidum supera de reddere parte, cum superum lumen tanto fervore fruatur, qui queat hic supter tam crasso corpore terram perquoquere umorem et calido focilare vapore? praesertim cum vix possit per saepta domorum insinuare suum radiis ardentibus aestum. quae ratiost igitur? ni mirum terra magis quod rara tenet circum fontem quam cetera tellus multaque sunt ignis prope semina corpus aquai.	There is said to be a spring at the shrine of Ammon that is cold in the light of day and warm in the nighttime. People marvel greatly at this spring, and some think it boils from the fierce sun beneath the earth when night has covered the lands in fearful darkness. But this is very far removed from true reasoning. For if the sun, touching the bare body of the water, could not make it warm on its upper surface, though its light above enjoys such great heat, how could it, here beneath earth so dense in body, cook the water through and nurse it with warm heat? Especially since it can scarcely, through the walls of houses, work its heat inside with its burning rays. What is the reason, then? No doubt it is that the earth around the spring is looser than the rest of the ground, and there are many seeds of fire near the body of the water.[9]
	/ hoc ubi roriferis terram nox obruit undis, extemplo penitus frigescit terra coitque.	/ So when night has buried the earth in its dew-bearing waves,

	LATIN	ENGLISH
	hac ratione fit ut, tam quam compressa manu sit, exprimat in fontem quae semina cumque habet ignis, quae calidum faciunt laticis tactum atque vaporem. inde ubi sol radiis terram dimovit obortus et rare fecit calido miscente vapore, rursus in antiquas redeunt primordia sedes ignis et in terram cedit calor omnis aquai. frigidus hanc ob rem fit fons in luce diurna. praeterea solis radiis iactatur aquai umor et in lucem tremulo rarescit ab aestu; propterea fit uti quae semina cumque habet ignis dimittat; quasi saepe gelum, quod continet in se, mittit et exsolvit glaciem nodosque relaxat.	at once the earth grows cold deep down and contracts. In this way it happens that, as if squeezed by a hand, it presses out into the spring whatever seeds of fire it holds, and these make the water warm to the touch and steaming. Then, when the sun has risen and parted the earth with its rays and loosened it, as its warm heat mingles in, the first beginnings of fire return again to their old seats, and all the water's heat withdraws into the earth. That is why the spring turns cold in the light of day. Besides, the water's moisture is tossed about by the sun's rays and thins out in the daylight from the quivering heat; and so it happens that whatever seeds of fire it holds it lets go, just as it often gives up the frost it holds within, and melts its ice and loosens its knots.
6.879	Frigidus est etiam fons, supra quem sita saepe stuppa iacit flammam concepto protinus igni, taedaque consimili ratione accensa per undas conlucet, quo cumque natans impellitur auris. ni mirum quia sunt in aqua permulta vaporis semina de terraque necessest funditus ipsa ignis corpora per totum consurgere fontem et simul exspirare foras exireque in auras, non ita multa tamen, calidus queat ut fieri fons; praeterea dispersa foras erumpere cogit vis per aquam subito sursumque ea conciliari. quod genus endo marist Aradi fons, dulcis aquai qui scatit et salsas circum se dimovet undas; et multis aliis praebet regionibus aequor utilitatem opportunam sitientibus nautis, quod dulcis inter salsas intervomit undas.	There is also a cold spring such that tow placed above it often throws out flame, catching fire at once, and a torch in the same way is kindled and shines across the waves, wherever it floats, driven by the breezes. No doubt this is because there are very many seeds of heat in the water, and from the earth itself, from its very depths, bodies of fire must rise up through the whole spring and at the same time breathe out and go forth into the air— not so many, however, that the spring could become warm. Besides, a force compels them, scattered, to burst out suddenly through the water and to combine above. Of this kind is the spring in the sea at Aradus, which gushes up with fresh water and pushes back the salt waves around it;

9 The oracle of Zeus Ammon in the Libyan desert, at the Siwa oasis in Egypt.

	LATIN	ENGLISH
		and in many other regions the sea offers timely help to thirsty sailors, because it spews up fresh water amid the salt waves.[10]
	/ sic igitur per eum possunt erumpere fontem et scatere illa foras; in stuppam semina quae cum conveniunt aut in taedai corpore adhaerent, ardescunt facile extemplo, quia multa quoque in se semina habent ignis stuppae taedaeque tenentes. nonne vides etiam, nocturna ad lumina linum nuper ubi extinctum admoveas, accendier ante quam tetigit flammam, taedamque pari ratione? multaque praeterea prius ipso tacta vapore eminus ardescunt quam comminus imbuat ignis. hoc igitur fieri quoque in illo fonte putandumst.	/ In the same way, then, those seeds can burst out through that spring and bubble forth; and when they meet in the tow or cling to the body of the torch, they easily catch fire at once, because they too contain many seeds of fire, the tow and the torches alike. Do you not see, too, that when you bring a wick just put out near a night-lamp, it catches fire before it has touched the flame, and a torch in the same way? And many other things besides, touched only by the heat, catch fire from a distance before the fire soaks them close at hand. This, then, we must suppose happens in that spring as well.

THE MAGNET

Particles streaming from the stone empty the air, so iron rings are pushed toward it.

	LATIN	ENGLISH
6.906	Quod super est, agere incipiam quo foedere fiat naturae, lapis hic ut ferrum ducere possit, quem Magneta vocant patrio de nomine Grai, Magnetum quia sit patriis in finibus ortus. hunc homines lapidem mirantur; quippe catenam saepe ex anellis reddit pendentibus ex se. quinque etenim licet inter dum pluresque videre ordine demisso levibus iactarier auris, unus ubi ex uno dependet supter adhaerens ex alioque alius lapidis vim vinclaque noscit; usque adeo permananter vis pervalet eius.	As for what remains, I will begin to explain by what law of nature it comes about that this stone can draw iron— the stone the Greeks call magnet, from its native name, because it has its origin within the native borders of the Magnesians. People marvel at this stone; for it often forms a chain of rings hanging from it. Indeed you can sometimes see five or more in a hanging line, swaying in the light breezes, where one hangs from another, clinging underneath, and each learns from the next the stone's power and bonds; so pervasively does its power prevail.[11]
6.917	Hoc genus in rebus firmandumst multa prius quam ipsius rei rationem reddere possis,	In matters of this kind, many points must be established before

10 Aradus, an island city off the Phoenician coast (modern Arwad, Syria).

	LATIN	ENGLISH
	et nimium longis ambagibus est adeundum; quo magis attentas auris animumque reposco.	you can give an account of the thing itself, and it must be approached by very long, winding paths; so all the more I ask for attentive ears and mind.
6.921	Principio omnibus ab rebus, quas cumque videmus, perpetuo fluere ac mitti spargique necessest corpora quae feriant oculos visumque lacessant. perpetuoque fluunt certis ab rebus odores; frigus ut [a] fluviis, calor a sole, aestus ab undis aequoris, exesor moerorum, litora propter; nec varii cessant sonitus manare per auras; denique in os salsi venit umor saepe saporis, cum mare versamur propter, dilutaque contra cum tuimur misceri absinthia, tangit amaror. usque adeo omnibus ab rebus res quaeque fluenter fertur et in cunctas dimittitur undique partis nec mora nec requies interdatur ulla fluendi, perpetuo quoniam sentimus et omnia semper cernere odorari licet et sentire sonare.	First, from all the things we see there must constantly flow, be sent out and scattered bodies that strike the eyes and provoke sight. And smells flow constantly from certain things, as cold from rivers, heat from the sun, spray from the waves of the sea, which eats away walls along the shores, and various sounds never cease to flow through the air. Then, a moist salty taste often comes into the mouth when we walk beside the sea; and when we watch, close by, wormwood being diluted and mixed, its bitterness touches us. So true is it that from all things each thing is carried off in a flow and sent out in all directions everywhere, and no delay or rest from flowing is granted, since we feel constantly, and can always see and smell all things, and hear them sound.
6.936	Nunc omnis repetam quam raro corpore sint res commemorare; quod in primo quoque carmine claret. quippe etenim, quamquam multas hoc pertinet ad res noscere, cum primis hanc ad rem protinus ipsam, qua de disserere adgredior, firmare necessest nil esse in promptu nisi mixtum corpus inani. principio fit ut in speluncis saxa superna sudent umore et guttis manantibus stillent. manat item nobis e toto corpore sudor, crescit barba pilique per omnia membra, per artus. diditur in venas cibus omnis, auget alitque corporis extremas quoque partis unguiculosque. frigus item transire per aes calidumque vaporem sentimus, sentimus item transire per aurum atque per argentum, cum pocula plena tenemus.	Now I will go back to recall how porous in body all things are—a point made clear in my first book as well. For although knowing this bears on many matters, first of all, for this very subject that I am setting out to discuss, it must be established that nothing we can see is anything but body mixed with void. First, it happens that in caves the rocks overhead sweat with moisture and drip with trickling drops. Likewise sweat flows out from our whole body, the beard grows, and hair over all our limbs and joints. Food is spread into all the veins, and it increases and nourishes even the farthest parts of the body, down to the nails. Likewise we feel cold and warm heat pass through bronze;

11 The Magnesians of Thessaly or of Magnesia in Asia Minor; the Greek word magnēs gives our "magnet."

	LATIN	ENGLISH
		we feel them likewise pass through gold and through silver, when we hold full cups.
	/ denique per dissaepta domorum saxea voces pervolitant, permanat odor frigusque vaposque ignis, qui ferri quoque vim penetrare suëvit, denique qua circum caeli lorica coërcet, morbida visque simul, cum extrinsecus insinuatur; et tempestate in terra caeloque coorta in caelum terrasque remotae iure facessunt; quandoquidem nihil est nisi raro corpore nexum.	/ Then again, voices fly through the stone walls of houses; smell seeps through, and cold, and the heat of fire, which regularly pierces even the strength of iron; and lastly, where the breastplate of the sky hems the world around, the force of disease too, when it creeps in from outside; and storms that have arisen on earth and in the sky, withdrawn afar, rightly make their way off into sky and earth; since nothing is put together except with porous body.
6.959	Huc accedit uti non omnia, quae iaciuntur corpora cumque ab rebus, eodem praedita sensu atque eodem pacto rebus sint omnibus apta. principio terram sol excoquit et facit are, at glaciem dissolvit et altis montibus altas extructas[que] nives radiis tabescere cogit; denique cera lique fit in eius posta vapore. ignis item liquidum facit aes aurumque resolvit, at coria et carnem trahit et conducit in unum. umor aquae porro ferrum condurat ab igni, at coria et carnem mollit durata calore. barbigeras oleaster eo iuvat usque capellas, effluat ambrosias quasi vero et nectare tinctus; qua nihil est homini quod amarius fronde ac[ida] extet.	Add to this that not all the bodies thrown off from things are endowed with the same effect on the senses or suited in the same way to all things. First, the sun bakes the earth and makes it dry, but it melts ice, and on high mountains it forces the snows, high and heaped up, to waste away under its rays; lastly, wax set in its heat turns liquid. Fire likewise makes bronze liquid and melts gold, but hides and flesh it shrivels and draws together. Then again, water hardens iron fresh from the fire, but softens hides and flesh hardened by heat. The wild olive delights the bearded goats so much that it might truly be dripping with ambrosia and steeped in nectar; yet nothing exists that is more bitter to man than its sour leaves.
	/ denique amaracinum fugitat sus et timet omne unguentum; nam saetigeris subus acre venenumst; quod nos inter dum tam quam recreare videtur. at contra nobis caenum taeterrima cum sit spurcities, eadem subus haec iucunda videtur, insatiabiliter toti ut volvantur ibidem.	/ Then again, a pig shuns marjoram oil and fears every perfume; for to bristly pigs it is a sharp poison, though to us it sometimes seems almost to revive us. But on the other hand, though mud is to us the foulest filth, to pigs this same stuff seems delightful, so that they wallow in it all over, insatiably.
6.979	Hoc etiam super est, ipsa quam dicere de re adgredior, quod dicendum prius esse videtur. multa foramina cum variis sint reddita rebus,	This too remains, before I set out to speak of the matter itself— a point that it seems must be made first.

	LATIN	ENGLISH
	dissimili inter se natura praedita debent esse et habere suam naturam quaeque viasque. quippe etenim varii sensus animantibus insunt, quorum quisque suam proprie rem percipit in se; nam penetrare alio sonitus alioque saporem cernimus e sucis, alio nidoris odores. [scilicet id fieri cogit natura viarum] [multimodis varians, ut paulo ostendimus ante.] praeterea manare aliud per saxa videtur, atque aliud lignis, aliud transire per aurum, argentoque foras aliud vitroque meare; nam fluere hac species, illac calor ire videtur, atque aliis aliud citius transmittere eadem.	Since many pores have been given to various things, they must be endowed with natures unlike one another, and each must have its own nature and passages. For indeed living creatures have various senses, each of which takes in its own proper object; for we see that sound penetrates by one way, and by another the taste from juices, by another the smell of scents. [The nature of the passages, of course, makes this happen,] [varying in many ways, as I showed a little before.] Besides, one thing seems to seep through rocks, another through wood, another to pass through gold, and another to make its way out through silver and glass; for images seem to flow by one path, heat to go by another, and some things to pass through the same openings faster than others.
	/ scilicet id fieri cogit natura viarum multimodis varians, ut paulo ostendimus ante, propter dissimilem naturam textaque rerum.	/ The nature of the passages, of course, makes this happen, varying in many ways, as I showed a little before, because of the unlike nature and texture of things.
6.998	Qua propter, bene ubi haec confirmata atque locata omnia constiterint nobis praeposta parata, quod super est, facile hinc ratio reddetur et omnis causa pate fiet, quae ferri pelliciat vim.	Therefore, once all these things have been well established and set in place and stand firm, laid out and ready for us beforehand, from here on the account of what remains will be easily given, and the whole cause will be laid open that entices the force of iron.
6.1002	Principio fluere e lapide hoc permulta necessest semina sive aestum, qui discutit aëra plagis, inter qui lapidem ferrumque est cumque locatus. hoc ubi inanitur spatium multusque vace fit in medio locus, extemplo primordia ferri in vacuum prolapsa cadunt coniuncta, fit utque anulus ipse sequatur eatque ita corpore toto. nec res ulla magis primoribus ex elementis indupedita suis arte conexa cohaeret quam validi ferri natura et frigidus horror. quo minus est mirum, quod dicitur esse alienum, corpora si nequeunt e ferro plura coorta in vacuum ferri, quin anulus ipse sequatur;	First, there must flow from this stone a great many seeds, or a current, that scatters with blows the air that lies between the stone and the iron. When this space is emptied and much room becomes vacant in between, at once the first beginnings of the iron slip forward and fall, joined together, into the void, and it happens that the ring itself follows and so moves with its whole body. For no thing, entangled by its own first elements, coheres more tightly bound together than the nature of strong iron, that cold, bristling stuff.

LATIN	ENGLISH
quod facit et sequitur, donec pervenit ad ipsum iam lapidem caecisque in eo compagibus haesit.	So it is less surprising—a thing said to be strange— if many bodies rising from the iron cannot move into the void without the ring itself following; and this it does, following until it reaches the stone itself and clings to it with unseen fastenings.
/ hoc fit idem cunctas in partis; unde vace fit cumque locus, sive e transverso sive superne, corpora continuo in vacuum vicina feruntur; quippe agitantur enim plagis aliunde nec ipsa sponte sua sursum possunt consurgere in auras. huc accedit item, quare queat id magis esse, haec quoque res adiumento motuque iuvatur, quod, simul a fronte est anelli rarior aër factus inanitusque locus magis ac vacuatus, continuo fit uti qui post est cumque locatus aër a tergo quasi provehat atque propellat. semper enim circum positus res verberat aër; sed tali fit uti propellat tempore ferrum, parte quod ex una spatium vacat et capit in se.	/ The same thing happens in every direction: wherever a place becomes empty, whether from the side or from above, the neighboring bodies are carried at once into the void; for they are set moving by blows from elsewhere, and cannot of their own accord rise up into the air. Add to this also—a reason why this can happen all the more— that this process is helped by a supporting motion: as soon as the air in front of the ring has been made thinner, and the place more emptied and vacant, at once it happens that whatever air lies behind pushes it forward from the rear, as it were, and drives it on. For the air placed around things always beats on them; but at such a time it happens that it drives the iron forward, because on one side the space is empty and takes it in.
/ hic, tibi quem memoro, per crebra foramina ferri parvas ad partis subtiliter insinuatus trudit et inpellit, quasi navem velaque ventus. denique res omnes debent in corpore habere aëra, quandoquidem raro sunt corpore et aër omnibus est rebus circum datus adpositusque. hic igitur, penitus qui in ferrost abditus aër, sollicito motu semper iactatur eoque verberat anellum dubio procul et ciet intus, scilicet illo eodem fertur, quo praecipitavit iam semel et partem in vacuam conamina sumpsit.	/ This air I tell you of, through the iron's many pores subtly working its way in to its tiny parts, thrusts and drives it, as the wind drives a ship and its sails. Then again, all things must have air in their bodies, since they are porous in body, and air is placed around and against all things. This air, then, that lies hidden deep in the iron is always tossed about in restless motion, and so beyond doubt it beats on the ring and stirs it from within; the ring, of course, is carried the same way it has already plunged once before, having made its effort toward the empty part.

6.1042

	LATIN	ENGLISH
	Fit quoque ut a lapide hoc ferri natura recedat inter dum, fugere atque sequi consueta vicissim. exultare etiam Samothracia ferrea vidi et ramenta simul ferri furere intus ahenis in scaphiis, lapis hic Magnes cum subditus esset; usque adeo fugere a saxo gestire videtur. aere interposito discordia tanta creatur propterea quia ni mirum prius aestus ubi aeris praecepit ferrique vias possedit apertas, posterior lapidis venit aestus et omnia plena invenit in ferro neque habet qua tranet ut ante; cogitur offensare igitur pulsareque fluctu ferrea texta suo; quo pacto respuit ab se atque per aes agitat, sine eo quod saepe resorbet.	It also happens that the nature of iron sometimes draws back from this stone, being accustomed to flee and follow by turns. I have even seen Samothracian iron rings leap up, and at the same time iron filings rage inside bronze bowls, when this Magnesian stone was placed beneath; so eagerly does the iron seem to want to flee the stone. When bronze is placed between, such great discord arises because, no doubt, when the current from the bronze has come first and taken possession of the iron's open passages, the stone's current comes after and finds everything full in the iron, and has no way to swim through as before; so it is forced to strike and beat with its flood against the iron's texture; in this way it spits it away and drives it through the bronze—the very thing it often sucks back without it.[12]
6.1056	Illud in his rebus mirari mitte, quod aestus non valet e lapide hoc alias impellere item res. pondere enim fretae partim stant, quod genus aurum; at partim raro quia sunt cum corpore, ut aestus pervolet intactus, nequeunt inpellier usquam, lignea materies in quo genere esse videtur. interutrasque igitur ferri natura locata aeris ubi accepit quaedam corpuscula, tum fit, inpellant ut eo Magnesia flumine saxa. nec tamen haec ita sunt aliarum rerum aliena, ut mihi multa parum genere ex hoc suppeditentur, quae memorare queam inter se singulariter apta. saxa vides primum sola colescere calce. glutine materies taurino iungitur una, ut vitio venae tabularum saepius hiscant quam laxare queant compages taurea vincla.	In these matters, stop wondering at this: that the current from this stone cannot drive other things in the same way. For some stand firm, relying on their weight, like gold; others, because they are so porous in body that the current flies through untouched, cannot be driven anywhere— and wood seems to be of this kind. The nature of iron, then, placed between the two, when it has taken in certain small bodies of bronze, then it happens that the Magnesian stones drive it with their stream. Yet these things are not so foreign to other things that I lack a good supply of many of this kind that I could mention, uniquely suited to each other. You see, first, that stones bond together with lime

12 Samothracian rings: iron rings associated with the mystery cult on the Aegean island of Samothrace.

	LATIN	ENGLISH
		alone. Timber is joined into one by bull's glue, so that the grain of the planks will more often split from a flaw than the joints can slacken their bonds of bull's glue.
	/ vitigeni latices aquai fontibus audent misceri, cum pix nequeat gravis et leve olivom. purpureusque colos conchyli iungitur uno corpore cum lanae, dirimi qui non queat usquam, non si Neptuni fluctu renovare operam des, non mare si totum velit eluere omnibus undis. denique res auro non aurum copulat una, aerique [aes] plumbo fit uti iungatur ab albo? cetera iam quam multa licet reperire! quid ergo? nec tibi tam longis opus est ambagibus usquam nec me tam multam hic operam consumere par est, sed breviter paucis praestat comprendere multa. quorum ita texturae ceciderunt mutua contra, ut cava conveniant plenis haec illius illa huiusque inter se, iunctura haec optima constat.	/ The vine-born liquor readily mixes with water from springs, though heavy pitch and light olive oil cannot. The purple dye of the shellfish unites into one body with wool, so that it cannot be separated at all, not even if you set to work again and again with Neptune's waves, not if the whole sea should wish to wash it out with all its waters. Lastly, is it not one thing alone that bonds gold to gold, and does it not happen that bronze is joined to bronze by white lead? How many other cases one can find! What then? You have no need at all of such long, winding paths, nor is it right for me to spend so much effort here; it is better to cover much briefly, in few words. Where the textures of things have so fallen out to match each other that the hollows of this fit the solids of that, and those of that the solids of this, this joining is the best.
	/ est etiam, quasi ut anellis hamisque plicata inter se quaedam possint coplata teneri; quod magis in lapide hoc fieri ferroque videtur.	/ It is also possible that some things, linked as if by rings and hooks to one another, can be held coupled together; and this seems to happen above all with this stone and iron.

THE CAUSES OF DISEASE

Harmful seeds in the air and water make foreign climates and epidemics dangerous.

	LATIN	ENGLISH
6.1090	Nunc ratio quae sit morbis aut unde repente mortiferam possit cladem conflare coorta morbida vis hominum generi pecudumque catervis, expediam, primum multarum semina rerum esse supra docui quae sint vitalia nobis, et contra quae sint morbo mortique necessest multa volare; ea cum casu sunt forte coorta et perturbarunt caelum, fit morbidus aër. atque ea vis omnis morborum pestilitasque	Now what the cause of diseases is, and from where, suddenly arising, the force of disease can blow up a deadly disaster for the race of men and the herds of cattle, I will explain. First, I have taught above that there are seeds of many things that are life-giving for us, and, on the other hand, many that bring disease

LATIN	ENGLISH
aut extrinsecus ut nubes nebulaeque superne per caelum veniunt aut ipsa saepe coorta de terra surgunt, ubi putorem umida nactast intempestivis pluviisque et solibus icta. nonne vides etiam caeli novitate et aquarum temptari procul a patria qui cumque domoque adveniunt ideo quia longe discrepitant res?	and death must fly about; when these by chance have happened to arise and have disordered the sky, the air becomes diseased. And all that force of diseases, that pestilence, either comes from outside, like clouds and mists, from above through the sky, or often gathers and rises from the earth itself, when the damp ground has taken on rot, struck by unseasonable rains and suns. Do you not see, too, that by strange climate and water all are afflicted who, far from their homeland and home, arrive, because conditions differ widely?
/ nam quid Brittannis caelum differre putamus, et quod in Aegypto est, qua mundi claudicat axis, quidve quod in Ponto est differre et Gadibus atque usque ad nigra virum percocto saecla colore? quae cum quattuor inter se diversa videmus quattuor a ventis et caeli partibus esse, tum color et facies hominum distare videntur largiter et morbi generatim saecla tenere. est elephas morbus qui propter flumina Nili gignitur Aegypto in media neque praeterea usquam. Atthide temptantur gressus oculique in Achaeis finibus. inde aliis alius locus est inimicus partibus ac membris; varius concinnat id aër.	/ For how different, do we think, is the climate of the Britons from that of Egypt, where the axis of the world slants, or how different that of Pontus from that of Gades, and on to the peoples of men whose skin the sun has baked dark? Since we see these four regions differ from one another, lying under the four winds and quarters of the sky, so the color and features of people are seen to vary widely, and diseases hold their own peoples, kind by kind. There is the elephant disease, produced by the streams of the Nile in the middle of Egypt, and nowhere else. In Attica the feet are afflicted, and the eyes in Achaean lands. So different places are hostile to different parts and limbs; the varied air brings this about.[13]
/ proinde ubi se caelum, quod nobis forte alienum, commovet atque aër inimicus serpere coepit, ut nebula ac nubes paulatim repit et omne qua graditur conturbat et immutare coactat, fit quoque ut, in nostrum cum venit denique caelum, corrumpat reddatque sui simile atque alienum. haec igitur subito clades nova pestilitasque aut in aquas cadit aut fruges persidit in ipsas	/ So when a sky that happens to be alien to us stirs itself and a hostile air begins to creep, it crawls slowly like mist and cloud, and everything in its path it throws into disorder and forces to change; and so it happens that when at last it reaches our sky,

13 Gades is Cádiz in Spain; the "elephant disease" (elephantiasis) is probably a form of leprosy.

	LATIN	ENGLISH
	aut alios hominum pastus pecudumque cibatus, aut etiam suspensa manet vis aëre in ipso et, cum spirantes mixtas hinc ducimus auras, illa quoque in corpus pariter sorbere necessest. consimili ratione venit bubus quoque saepe pestilitas et iam pigris balantibus aegror.	it corrupts it and makes it like itself, and alien to us. This new disaster and pestilence, then, suddenly either falls into the waters or settles on the crops themselves or on other food of men and fodder of beasts, or else the force stays suspended in the air itself, and when we breathe and draw in the air mixed with it, we must suck that into our body along with it. In the same way, pestilence often comes upon cattle too, and sickness upon the sluggish bleating flocks.
	/ nec refert utrum nos in loca deveniamus nobis adversa et caeli mutemus amictum, an caelum nobis ultro natura corumptum deferat aut aliquid quo non consuevimus uti, quod nos adventu possit temptare recenti.	/ Nor does it matter whether we come to places hostile to us and change the sky that cloaks us, or whether nature of its own accord brings us a corrupted sky or something we are not used to meeting, which can assail us by its fresh arrival.

THE PLAGUE OF ATHENS

A plague from Egypt ravages Athens, destroying bodies, minds, burial customs and religion.

	LATIN	ENGLISH
6.1138	Haec ratio quondam morborum et mortifer aestus finibus in Cecropis funestos reddidit agros vastavitque vias, exhausit civibus urbem. nam penitus veniens Aegypti finibus ortus, aëra permensus multum camposque natantis, incubuit tandem populo Pandionis omni. inde catervatim morbo mortique dabantur. principio caput incensum fervore gerebant et duplicis oculos suffusa luce rubentes. sudabant etiam fauces intrinsecus atrae sanguine et ulceribus vocis via saepta coibat atque animi interpres manabat lingua cruore debilitata malis, motu gravis, aspera tactu. inde ubi per fauces pectus complerat et ipsum morbida vis in cor maestum confluxerat aegris, omnia tum vero vitai claustra labababant. spiritus ore foras taetrum volvebat odorem, rancida quo perolent proiecta cadavera ritu.	Such a cause of diseases, and a deadly blast, once filled the fields with death in the land of Cecrops, laid waste the streets, and drained the city of its citizens. For it arose in the lands of Egypt and came from far within, crossing much air and the floating plains of the sea, and fell at last upon the whole people of Pandion. Then they were handed over in droves to disease and death. First, they had their heads on fire with heat, and both eyes red with a suffused glow. The throat, too, black inside, sweated with blood, and the passage of the voice, blocked with sores, closed up, and the tongue, the mind's interpreter, oozed with gore, weakened by the pain, heavy to move, rough to the touch. Then, when the force of disease had filled the chest through the throat and flowed together into the sick people's very heart, heavy with grief, then truly all the barriers of life began to totter.

LATIN	ENGLISH
	The breath rolled out a foul smell from the mouth, like the reek of rotting corpses cast aside.[14]
/ atque animi prorsum [tum] vires totius, omne languebat corpus leti iam limine in ipso. intolerabilibusque malis erat anxius angor adsidue comes et gemitu commixta querella, singultusque frequens noctem per saepe diemque corripere adsidue nervos et membra coactans dissoluebat eos, defessos ante, fatigans. nec nimio cuiquam posses ardore tueri corporis in summo summam fervescere partem, sed potius tepidum manibus proponere tactum et simul ulceribus quasi inustis omne rubere corpus, ut est per membra sacer dum diditur ignis. intima pars hominum vero flagrabat ad ossa, flagrabat stomacho flamma ut fornacibus intus. nil adeo posses cuiquam leve tenveque membris vertere in utilitatem, at ventum et frigora semper.	/ And then the strength of the whole mind entirely, and the whole body, languished, already on the very threshold of death. And to these unbearable evils anxious anguish was a constant companion, and complaint mixed with groans, and frequent retching, often through the night and day, forcing the sinews and limbs to contract continu- ally, broke them down, wearing out men already ex- hausted. Nor could you see, in anyone, with excessive heat the outermost part on the body's surface burning, but rather present a lukewarm touch to the hands, and at the same time the whole body red with sores, as if burned in, as when the sacred fire spreads through the limbs. But the inmost part of people burned to the bones; a flame burned in the stomach as in a furnace. You could turn nothing at all, however light and thin, to use for anyone's limbs—only wind and cold, always.
/ in fluvios partim gelidos ardentia morbo membra dabant nudum iacientes corpus in undas. multi praecipites nymphis putealibus alte inciderunt ipso venientes ore patente: insedabiliter sitis arida corpora mersans aequabat multum parvis umoribus imbrem. nec requies erat ulla mali: defessa iacebant corpora. mussabat tacito medicina timore, quippe patentia cum totiens ardentia morbis lumina versarent oculorum expertia somno. multaque praeterea mortis tum signa dabantur: perturbata animi mens in maerore metuque, triste supercilium, furiosus voltus et acer, sollicitae porro plenaeque sonoribus aures, creber spiritus aut ingens raroque coortus, sudorisque madens per collum splendidus umor, tenvia sputa minuta, croci contacta colore salsaque per fauces rauca vix edita tussi.	/ Some gave their limbs, burning with the disease, to icy rivers, throwing their naked bodies into the waves. Many plunged headlong, deep into the nymphs of the wells, meeting the water with their mouths gaping wide: a thirst that nothing could quench, drenching their parched bodies, made a great flood of water equal to a few drops. Nor was there any respite from the evil: bodies lay exhausted. Medicine muttered in silent fear, since so often, wide open and burning with dis- ease, they rolled the lights of their eyes, which knew no sleep. And many other signs of death were given then: the mind's reason disturbed in sorrow and fear, the gloomy brow, the frenzied, fierce face, the ears, moreover, troubled and full of ringing,

14 The plague that struck Athens in 430 BC, which Lucretius describes closely following Thucydides (2.47–54); Cecrops and Pandion were legendary kings of Athens.

LATIN	ENGLISH
	the breathing rapid, or deep and coming at long intervals, the gleaming moisture of sweat soaking the neck, the spittle thin and in small bits, tinged with the color of saffron, and salty, barely brought up through the throat with a hoarse cough.
/ in manibus vero nervi trahere et tremere artus a pedibusque minutatim succedere frigus non dubitabat. item ad supremum denique tempus conpressae nares, nasi primoris acumen tenve, cavati oculi, cava tempora, frigida pellis duraque in ore, iacens rictu, frons tenta manebat. nec nimio rigida post artus morte iacebant. octavoque fere candenti lumine solis aut etiam nona reddebant lampade vitam. quorum siquis, ut est, vitarat funera leti, ulceribus taetris et nigra proluvie alvi posterius tamen hunc tabes letumque manebat, aut etiam multus capitis cum saepe dolore corruptus sanguis expletis naribus ibat. huc hominis totae vires corpusque fluebat.	/ In the hands, moreover, the sinews would twitch, the limbs tremble, and the cold creep up bit by bit from the feet—without fail. Likewise, at last, toward the final hour, the nostrils were pinched, the tip of the nose sharp and thin, the eyes hollow, the temples sunken, the skin cold and hard on the face, the mouth gaping; the brow remained taut. And not long after, they lay with limbs stiff in death. Around the eighth shining light of the sun, or even at the ninth lamp, they gave up their life. If any of them, as happens, had escaped the doom of death, yet later, from foul sores and a black flux of the bowels, wasting and death awaited him, or else a great deal of corrupt blood, often with pain in the head, poured out through the clogged nostrils. Into this flowed all the man's strength and body.
/ profluvium porro qui taetri sanguinis acre exierat, tamen in nervos huic morbus et artus ibat et in partis genitalis corporis ipsas. et graviter partim metuentes limina leti vivebant ferro privati parte virili, et manibus sine non nulli pedibusque manebant in vita tamen et perdebant lumina partim. usque adeo mortis metus iis incesserat acer. atque etiam quosdam cepere oblivia rerum cunctarum, neque se possent cognoscere ut ipsi. multaque humi cum inhumata iacerent corpora supra corporibus, tamen alituum genus atque ferarum aut procul absiliebat, ut acrem exiret odorem, aut, ubi gustarat, languebat morte propinqua. nec tamen omnino temere illis solibus ulla comparebat avis, nec tristia saecla ferarum exibant silvis.	/ Then again, whoever had escaped the fierce flux of foul blood, still the disease went into his sinews and joints and into the very genitals of the body. And some, gravely fearing the threshold of death, lived on, deprived of their male parts by the knife, and some, without hands and feet, remained alive nonetheless, and some lost their eyes. So sharply had the fear of death come upon them. And some were even seized by forgetfulness of all things, so that they could not recognize themselves. And though many bodies lay unburied on the ground, heaped upon bodies, yet the race of birds and beasts either leapt far away to escape the pungent smell or, when they had tasted, grew faint with death close at hand.

	LATIN	ENGLISH
		Yet in those days hardly any bird at all appeared, nor did the grim tribes of wild beasts come out of the woods.
	languebant pleraque morbo et moriebantur. cum primis fida canum vis strata viis animam ponebat in omnibus aegre; extorquebat enim vitam vis morbida membris. incomitata rapi certabant funera vasta nec ratio remedii communis certa dabatur; nam quod ali dederat vitalis aëris auras volvere in ore licere et caeli templa tueri, hoc aliis erat exitio letumque parabat.	Most of them languished with the disease and died. Above all, the faithful strength of dogs, stretched out in every street, gave up its life in pain; for the force of the disease wrung the life from their limbs. Vast funerals, unattended, raced one another to be hurried off, nor was any sure, common method of cure avail- able; for what had given some the power to roll the life- giving breezes of air in their mouths and to gaze upon the vast spaces of the sky, that was ruin to others and brought on death.
6.1230	Illud in his rebus miserandum magnopere unum aerumnabile erat, quod ubi se quisque videbat implicitum morbo, morti damnatus ut esset, deficiens animo maesto cum corde iacebat, funera respectans animam amittebat ibidem. quippe etenim nullo cessabant tempore apisci ex aliis alios avidi contagia morbi, lanigeras tam quam pecudes et bucera saecla, idque vel in primis cumulabat funere funus nam qui cumque suos fugitabant visere ad aegros, vitai nimium cupidos mortisque timentis poenibat paulo post turpi morte malaque, desertos, opis expertis, incuria mactans. qui fuerant autem praesto, contagibus ibant atque labore, pudor quem tum cogebat obire blandaque lassorum vox mixta voce querellae. optimus hoc leti genus ergo quisque subibat.	In these matters one thing above all was pitiful and distressing: whenever anyone saw himself caught in the disease, as though condemned to death, his courage failing, he lay there with a grieving heart, and, looking only to his funeral, gave up his life on the spot. For at no time did they cease to catch, one from another, the contagion of the greedy dis- ease, like woolly flocks and horned herds, and this above all heaped death upon death. For all those who shunned visiting their own sick, too greedy for life and afraid of death— these, soon after, neglect punished with a shame- ful, evil death, slaughtering them, abandoned and bereft of help. But those who had stood by went to their death by contagion and by the toil that shame then compelled them to undertake, and the coaxing voice of the weary, mixed with the voice of complaint. So all the best people met this kind of death.
6.1247	Praeterea iam pastor et armentarius omnis et robustus item curvi moderator aratri languebat, penitusque casa contrusa iacebant corpora paupertate et morbo dedita morti. exanimis pueris super exanimata parentum	Besides, every shepherd and herdsman, and likewise the sturdy guider of the curved plow, languished, and bodies lay crammed deep inside huts, given over to death by poverty and disease.

LATIN	ENGLISH
corpora non numquam posses retroque videre matribus et patribus natos super edere vitam. nec minimam partem ex agris maeror is in urbem confluxit, languens quem contulit agricolarum copia conveniens ex omni morbida parte. omnia conplebant loca tectaque quo magis aestu, confertos ita acervatim mors accumulabat.	Over lifeless children you might sometimes see the lifeless bodies of parents, and, the other way round, see children breathing out their life upon mothers and fathers. And not the least part of this grief flowed from the fields into the city, brought there by the languishing crowd of farmers, gathering sick from every quarter. They filled all places and buildings; so all the more, in the heat, death piled them up in heaps, crowded together.
/ multa siti prostrata viam per proque voluta corpora silanos ad aquarum strata iacebant interclusa anima nimia ab dulcedine aquarum, multaque per populi passim loca prompta viasque languida semanimo cum corpore membra videres horrida paedore et pannis cooperta perire, corporis inluvie, pelli super ossibus una, ulceribus taetris prope iam sordeque sepulta. omnia denique sancta deum delubra replerat corporibus mors exanimis onerataque passim cuncta cadaveribus caelestum templa manebant, hospitibus loca quae complerant aedituentes. nec iam religio divom nec numina magni pendebantur enim: praesens dolor exsuperabat.	/ Many bodies, laid low by thirst and rolled along the street, lay stretched out by the fountain spouts, their breath cut off by the too-great sweetness of the water; and all through the public places and streets you might see drooping limbs, with half-dead bodies, bristling with filth and covered in rags, perish in the body's dirt, with nothing but skin upon their bones, already almost buried in foul sores and grime. Lastly, death had filled all the holy shrines of the gods with lifeless bodies, and everywhere all the temples of the heavenly ones stood burdened with corpses, places the temple-keepers had filled with guests. For no longer was the religion of the gods or their divine power much regarded: the present grief overwhelmed all.
/ nec mos ille sepulturae remanebat in urbe, quo prius hic populus semper consuerat humari; perturbatus enim totus trepidabat et unus quisque suum pro re [cognatum] maestus humabat. multaque [res] subita et paupertas horrida suasit; namque suos consanguineos aliena rogorum insuper extructa ingenti clamore locabant subdebantque faces, multo cum sanguine saepe rixantes, potius quam corpora desererentur, inque aliis alium populum sepelire suorum certantes; lacrimis lassi luctuque redibant; inde bonam partem in lectum maerore dabantur; nec poterat quisquam reperiri, quem neque morbus nec mors nec luctus temptaret tempore tali.	/ Nor did that custom of burial remain in the city with which this people had always before been used to bury their dead; for the whole people was in turmoil and panic, and each man in sorrow buried his own kin as circumstances allowed. And the sudden event and grim poverty prompted many things; for they would place their own blood relations, with a huge outcry, on pyres heaped up for others, and set torches beneath them, often brawling with much bloodshed rather than abandon the

LATIN	ENGLISH
	bodies, and on pyres of others a whole host of their own they fought to bury; worn out with tears and grief, they went home; then for the most part they took to their beds from grief; nor could anyone be found whom neither disease nor death nor mourning assailed at such a time.