

LUCRETIUS' NEW WORLD ORDER: MAKING A PACT WITH NATURE

Lucretius' poem *On the Nature of Things* poses a puzzle. It is ostensibly a poem on the physical universe; yet is also an ethical text. Lucretius calls on his countrymen, the Romans, to transform their lives in the light of the physical truths that he propounds. How does Lucretius combine physics with ethics? Epicurus, his philosophical master, divided his philosophical system into two main parts, physics and ethics, while using the conclusions derived from his physics as the starting-point of his ethics. Lucretius views the physical universe from the start as the proper home of humans, providing humans with the means to attain their natural goal, a life of pleasure. He combines physics and ethics into a new synthesis by proposing the integration of the human being in the natural world.

In this paper, I shall argue that Lucretius uses the notion of *foedera naturai*, 'treaties of nature', as a key concept in this demand for integration. Natural treaties map out the universe into natural domains of power, bounded against one another by inviolable limits. By recognising their condition as a finite domain of power within the natural order of things, human beings can attain a happiness like that of the gods. While solidly based on Epicurus' doctrines, this view offers a new focus on the human being as a participant in the natural world. It is also indebted to specifically Roman assumptions. Lucretius seeks to shift humans from their position in the Roman social and political order to a place in the natural order of things.

Lucretius' repeated use of the expression *foedus naturae* (*foedera naturai*) is very striking. The phrase is traditionally translated as 'law (laws) of nature'.¹ I agree that Lucretius conceives of the universe as law-governed. But *foedus* is not the same thing as 'law'; and this has received very little attention.² The term *foedus* is very familiar to

¹ C. Bailey's translations vary from 'laws of nature' (1.586) to 'pacts of nature' (5.310) and 'ordinances of nature' (2.302); see C. Bailey (ed.), *Lucretius, De rerum natura*, 3 vols (Oxford, 1947). A.A. Long has recently stressed that Lucretius' Epicurean universe is law-governed; see 'Lucretius on nature and the Epicurean self', in K.A. Algra, M.H. Koenen, and P.H. Schrijvers (edd.), *Lucretius and his Intellectual Background* (Amsterdam, 1997), 125–39, reprinted in A.A. Long, *From Epicurus to Epictetus* (Oxford, 2006), 202–20; cf. 'Chance and natural law in Epicureanism', *Phronesis* 22 (1977), 63–88, reprinted in A.A. Long, *From Epicurus to Epictetus* (Oxford, 2006), 157–77. In contrast with Long ('Lucretius on nature and the Epicurean self', 131 n. 7), however, I agree with Bailey (vol. 2, 699) that 'the meaning [of *foedera naturai*] is different from that of the modern expression' (that is, 'laws of nature'). As Bailey explains, Lucretius 'is not thinking of an observed uniformity of nature, but rather of the limits which nature imposes on the growth, life, powers, etc., of things.'

² K. Reich ('Der historische Ursprung des Naturgesetzbegriffs', in *Festschrift Ernst Kapp* [Hamburg, 1958], 121–34 at 125) suggests that the *foedera naturae* are the unions of atoms (*sygkrisis*) that make up the immutable substance of natural kinds. Long (n. 1, 'Chance and natural law in Epicureanism', 81) regards Reich's proposal as too simple; and he suggests that Lucretius may be combining a reference to concrete unions of atoms with a more abstract notion of law. In my view, P. Boyancé (*Lucrèce et l'épicurisme* [Paris, 1963], 87) has pointed the way to a correct understanding of *foedera naturae* by relating them to the organisation of the sensible world. Comparing Lucretius' natural compacts to Roman treaties, he assigns to them the negative function of setting up a barrier against the arbitrary intervention of the gods. He also identifies them as constraints imposed on 'particular beings' and suggests that death is, in a sense, 'the *foedus naturae* par excellence'.

the Romans as having the basic sense of 'treaty', with the extended sense of 'compact'. Lucretius, as I shall try to show, draws on the basic meaning of 'treaty' to conceptualise the universe as a kind of natural treaty organisation. Demarcated from one another by natural treaties, every created kind of thing, from entire world systems to every natural kind existing within a world, exercises powers of its own within fixed limits. Focussing on the human species, Lucretius demands that humans must use their unique natural power, reason, to recognise three basic limits: a limit to the power of the gods; a limit to their lifetime; and a limit of pleasure. These limits are enabling conditions rather than constraints, making it possible for humans to live a life of happiness.

In place of the political treaties by which the Romans traditionally mapped out their relations with their neighbours, the treaties of nature map out the natural relations of humans to one another and other natural kinds. Political treaties demarcate domains of power within which each party exercises powers of its own. Similarly, natural treaties demarcate domains within which each person is free to shape his or her life according to powers of one's own. In contrast with political treaties, on the other hand, natural treaties sweep away the false values that have traditionally sustained the Roman political community. By eliminating the tyranny of the gods and the drive for power and wealth, natural treaties substitute a system of values that allows each human being to live at peace with oneself and others.

This paper is in two parts. It will, first, analyse Lucretius' conception of a natural treaty and, second, discuss how Lucretius uses this conception to reshape Epicurean physics into an ethical text. The first part of the paper aims to show how Lucretius uses the conception of natural treaty to fit humans into the natural world. It argues that, analogously with political treaties, humans must recognise the place that is assigned to them by natural treaty. The second part investigates how Lucretius has restructured the order of Epicurus' physical teachings to convert his poem into an ethical text. This transformation, I propose, is based on the conception of the natural world as a treaty-ordered organisation. I shall add some suggestions on how Lucretius' vision of a treaty-ordered world differs from the Stoic conception of a world governed by law.

We may begin by noting that Epicurus does not use either the term 'treaty' or the term 'law' in reference to nature in his extant writings. Instead, he uses the terms *syntheke*, 'compact' or 'treaty', as well as *nomos*, 'law', to refer to arrangements made by humans with one other.³ The compacts are reciprocal agreements not to harm one another and not to be harmed; and laws are ways of formulating these agreements. Lucretius likewise uses the terms *foedus*, 'compact' or 'treaty' and *lex*, 'law', to refer to agreements among humans.⁴ He departs from Epicurus' extant usage, on the other hand, by extending the notion of 'treaty', along with 'law', to nature. Just as human laws are rooted in a compact, so natural laws are rooted in natural treaties.

What prompted Lucretius to extend the term *foedus*, along with *lex*, from the realm of human action to nature? In antiquity, as now, a treaty may be distinguished by four main features. First, a treaty is an agreement between self-governing states. Second, a

³ For *synthêkê*, see *Authoritative Opinions* 32, 33 and 35; for *nomos*, see *Authoritative Opinion* 37.

⁴ Lucretius identifies the very first compacts (*foedera*, 5.1025) as the stammering attempts of neighbours to agree with each other not to harm or be harmed and, in particular, to have pity on the weak. To violate the laws of a state is to violate the 'common treaties for peace' (*communia foedera pacis*, 5.1155). He mentions treaties made by states at 5.1443.

treaty is normally designed to end conflict or promote cooperation. Third, a treaty sets out conditions under which each party may continue to act. These conditions place limits on the powers of each party, while leaving each party free to act within these limits. A basic limit is the fixing of territorial boundaries. Fourth, a treaty must be respected. These features differentiate a treaty from a law. By contrast with a treaty, a law is a command that is imposed unilaterally by a government on its subjects. Although a government may frame laws corresponding to the conditions agreed upon in a treaty, there is the fundamental difference that a treaty is an agreement that must be respected, whereas a law is a command that must be obeyed.

Treaties were an essential part of the process by which the Roman state grew from a small village to an empire. As the Romans clashed with ever more distant neighbours, they regulated their relations by treaties. They distinguished between equal and unequal treaties: in an equal treaty, each party is equal; an unequal treaty is between unequal partners. In the many unequal treaties contracted by the Romans, the inferior party normally retained local autonomy while agreeing to provide certain benefits, especially military aid, to the Romans. A primary concern was the fixing of boundaries. For example, Rome and Carthage reportedly set boundaries to their domains in a series of equal treaties contracted prior to the Punic Wars.⁵ In an unequal treaty made in 188 B.C.E., King Antiochus was required to retreat to the river Halys in Asia Minor.⁶ In Lucretius' lifetime, the Romans were allied with numerous communities by unequal treaties; it is doubtful whether they recognised any equal treaties.⁷

The Romans associated the term *foedus* with *fides*, 'trust' or 'good faith'.⁸ This trust was viewed as a sacred obligation, put under the protection of their own supreme god, Jupiter. In making a treaty, the Romans called upon Jupiter to smite his people, the Romans, should they ever transgress it. The priests who conducted the ceremony illustrated what would happen by striking a pig with a flint knife.⁹

In his poem, Lucretius uses the term *foedus*, 'treaty', seven times, and the term *lex*, 'law', three times, in connection with nature. Natural treaties are tied to the principle that each kind of thing has finite powers. By determining 'what each kind of thing can and cannot do',¹⁰ nature's treaties impose an inviolable boundary, visualised by Lucretius as 'a deep-set boundary stone' (*alte terminus haerens*).¹¹ These boundaries apply to atoms no less than to every created kind of thing. Lucretius, however, visualises them as applying primarily to created kinds. Nature uses the boundaries that apply to the atoms to map out the sensible world as though by a treaty. Each sensible kind of thing is marked off both spatially and temporally from every other kind of sensible thing. Within these boundaries, each kind exercises powers of its

⁵ Polyb. 3.22–5; see A.N. Sherwin-White, *The Roman Citizenship* (Oxford, 1973), 192–4.

⁶ Livy 38.38.4; cf. Polyb. 21.42.

⁷ On treaties made with Italian communities, see Sherwin-White (n. 5), 21–32 and 119–27, also T. Hantos, *Das römische Bundesgenossensystem in Italien* (Munich, 1983), 151–81. W. Dahlheim (*Struktur und Entwicklung des römischen Völkerrechts im dritten und zweiten Jahrhundert v. Chr.* [Munich, 1968], 21–2) argues convincingly that there were no treaties of surrender (*editio*); on the other hand, communities that surrendered might be allowed to contract a treaty subsequently (69–82).

⁸ A. Watson (*International Law in Archaic Rome: War and Religion* [Baltimore, 1993], 58) cites Varro (citing Ennius) for the connection. See also Cic. *Off.* 3. 111: *foedera quibus etiam cum hoste devincitur fides* ('the treaties by which trust is established as a bond even with an enemy').

⁹ Livy 1.24.8–9; see also Watson (n. 8), 33–4.

¹⁰ 1.586–7. Cf. 1.594–5, 5.88–9, and 6.64–5.

¹¹ 1.77, 1.596, 5.90 and 6.66.

own. Among sensible things, Lucretius gives special attention to the temporal boundaries of birth, growth, and death of living things. Among the living creatures of this world, the human being stands out as alone having the power to use reason and thereby attain happiness.

As Philip De Lacy showed in an important article, the theme of limits is a basic concept of Epicurean philosophy. He points out that Lucretius uses it especially clearly as a unifying principle.¹² I suggest that Lucretius not only gives special prominence to the notion of limits, but also uses it in a fundamentally new way to transform Epicurean physics into an ethical system. Two conspicuous differences are: first, although Epicurus uses the notion of a limit liberally in his physics, he pairs it with the notion of a lack of limits; and, second, while he recognises natural kinds, he does not view their boundaries as a basis for his ethical teachings. In his extant writings, the term *horos*, boundary-stone, occurs only in his ethics, as designating a boundary to pleasure, as well as boundaries to pain and desire.¹³ Scholars have frequently noted that, unlike Epicurus, Lucretius gives much attention to the differentiation of created kinds. As I see it, Lucretius highlights this demarcation by the concept of treaties. By situating the human being within the natural world as a finite domain of power, held in relation with all other kinds by powers of its own, he raises humans to a condition like that of the gods.

Lucretius underscores the concept of a treaty by appealing to the specifically Roman connotations of the word *terminus*, 'boundary-stone'. The Romans traditionally regarded boundary-stones as sacred objects, representing the god Terminus. In an annual ritual, Ovid tells us, the two owners of adjoining fields would come up to the joint boundary-stone and adorn it on each side.¹⁴ They invoked Terminus as the deity who sets boundaries to peoples, cities and huge kingdoms with incorruptible 'good faith' (*fides*).¹⁵ Ovid's final punch line is that other nations have fixed boundaries to their lands; Rome's territory is identical with the world.¹⁶ On this view, Rome's treaties with other nations are all unequal. Lucretius joins the notion of *terminus* to that of treaties to highlight the inviolability of natural boundaries.

Lucretius' first use of the expression 'natural treaty' occurs about halfway through Book 1 in the arguments on the indestructibility of the atoms. The observed permanence of created kinds, he claims, provides proof that the atoms must be immutable; for otherwise there would be no limit to the power of each created thing, or 'deeply fixed boundary-stone'. The passage is worth quoting at length (1.584–98):

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 nimirum; nam si primordia rerum
commutari aliqua possent ratione revicta,

¹² P.H. De Lacy, 'Limit and variation in the Epicurean philosophy', *Phoenix* 23 (1969), 104–13 at 104–5 and 113.

¹³ *Authoritative Opinions* 3 and 11.

¹⁴ *Fast.* 2.643–4.

¹⁵ *Fast.* 2.659–61

¹⁶ *Fast.* 2.683–4.

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 saecula referre
 naturam mores victum motusque parentum.

Further, since there is a limit of growth and of preserving life to things according to kind, and it is solemnly decreed by the treaties of nature what each kind of thing can and cannot do, nor is anything changed but that all things remain always the same, so that all the various birds in order display the marks of their kind on their body, they must surely also have a corporeal substance of unchanging matter. For if the primary constituents of things could be changed, conquered in some way, it would also be uncertain what can and cannot arise, in short, how the power of each thing is limited and there is a deep-set boundary-stone, nor could the generations so often bring back, according to kinds, the nature, habits, way of life, and motions of their parents.

If the atoms were not immutable, Lucretius argues, the various kinds of created things, such as the various kinds of birds, would not have the distinctive powers that are allocated to them by the 'treaties of nature'. These treaties fix a limit to growth and to life, thus allowing each kind of thing to flourish with powers of its own within its lifetime. Focussing on what a created kind of thing can do, Lucretius fills the boundaries of a lifetime with a plenitude of powers – kinds of bodies, habits, a way of sustaining life (*victus*), and motions. He could hardly have chosen a better example to make his point than the various kinds of birds – a favourite type of example throughout his poem. The various kinds of birds, differentiated by clear markings, illustrate especially vividly not only the diversity of powers from one species to another, but also their energetic use. Lucretius views the limits determined by nature's treaties under a double aspect: determining both what a thing can do and what it cannot do, the treaties set up enabling conditions as much as they impose limits.

Even though this first reference to natural treaties does not come at a prominent juncture in Lucretius' argument, two features draw attention to the concept. First is the wording. Lucretius emphasises the sanctity of nature's treaties by using both the verb *sancitum*, 'it is solemnly decreed', and the archaic genitive *naturai*. The spondaic verse ending, created by the four long syllables of *naturai*, underscores the timeless inviolability of nature's treaties. Second, the reference to treaties rounds out a theme that Lucretius announced in the introduction of his poem. There he proposed to show, following Epicurus, that there is a limit to the power of all things; and he underscored this theme by the image of a boundary-stone (1.74–9). He viewed these limits as barriers to divine encroachment. By now visualising the boundary-stones as determined by 'treaties of nature', he portrays a new kind of governance: demarcated from each other by natural treaties, each kind of thing exercises powers of its own, free from arbitrary intervention by the gods.

The next time Lucretius refers to natural treaties, he repeats the solemn formulation *foedera naturai*. He now uses it to focus on one side of the creative process: the growth of a thing from its creation to the full development of its powers. As before, his argument is based on the observed permanence of the various kinds of things. It follows from our observations, he argues, that the distribution of atoms in the universe is always the same, with the result that observed kinds always have the same powers as granted by nature's treaties (2.299–302):

...quae consuerint gigni gignentur eadem
 condicione et erunt et crescent vique valebunt,
 quantum cuique datum est per foedera naturai.

...the same things that have been accustomed to be created will be created under the same conditions, and will grow and be strong in power, as much as is given to each by the treaties of nature.

Natural treaties determine the 'conditions' under which each kind of thing is created and grows to its full strength. Just as ordinary treaties set out conditions under which each party exercises its powers, nature's treaties set out conditions for the full exercise of powers by each kind of thing. By emphasising the strength of a thing, Lucretius draws attention to what a thing can do rather than what it cannot do.

What a thing cannot do is to exceed its powers by either acquiring altogether different powers or developing its powers beyond a fixed limit of growth and decline. Thus it is impossible for a species to mix with another. In Book 2, Lucretius refers to this impossibility by the term *lex* as he points out that all created things 'are held (*teneri*) by certain laws (*legibus*)' that set a boundary to each kind.¹⁷ Consisting in the various ways in which atoms combine, these laws separate not only animals from each other, but also earth from sea and sky from earth (2.727–9). Recounting the origin of plants and animals in Book 5, Lucretius uses the term *foedus* to highlight the prohibition against a mixing of kinds (5.922–4):

...
non tamen inter se possunt complexa creari,
sed res quaeque suo ritu procedit et omnes
foedere naturae certo discrimina servant.

[Animals and plants] cannot be created mixed among themselves; each thing proceeds in its own way and all observe distinctions by a fixed treaty of nature.

The terms 'law' and 'treaty' refer to the same conditions, though from different perspectives. Things 'are held', passively, by laws that make it impossible for them to exceed certain limits; they 'observe' treaties, on the other hand, by actively exercising finite powers. The term 'law' suggests the necessity to submit to constraints; the term 'treaty' suggests a flourishing of powers within limits. Lucretius uses the legal term *servare*, 'keep' or 'observe', to echo the principle that treaties must be respected.¹⁸

Incredibly, the creative vigour that is ordained by nature's treaties applies not only to the things that we observe in this world, but also to entire world systems, born in infinite numbers throughout the infinite universe. The sky, earth, sun, moon, sea and so on, that we see existing uniquely in our world, are not unique: they are tokens of a kind that flourishes with countless births throughout the infinite universe. This process is joined by death. Just as the sky, earth and so on, in our world were once born, so 'a deep-set boundary-stone of life, fixed by compact (*depactus*), awaits' them.¹⁹ The term *depactus* here takes the place of 'treaty'. With 'joyful increase', all things gradually ascend the steps to maturity (2.1122–3). 'Perfecting' its creations, nature leads them all the way 'to the farthest boundary of growth' (*ad extremum crescendi perfica finem*, 2.1116–7). At that point, corresponding to the vigour of the

¹⁷ 2.718–9. I accept Bailey's emendation (n. 1) of line 719: *sed ne forte putes animalia sola teneri / legibus hisce, eadem ratio res terminat omnis* ('But in case that you think that animals alone are held by these laws, the same cause sets boundaries to all things').

¹⁸ Cf. Livy 1.28.9: *fidem ac foedera servare*.

¹⁹ 2.1087–9: *quando quidem vitae depactus terminus alte / tam manet haec et tam nativo corpore constant / quam genus omne, quod his generatimst rebus abundans* ('For the deep-set boundary-stone of life, set by compact, awaits these things, and they consist of a body that is born, as much as every kind of thing that flourishes, according to kind, among the things here').

preceding process, nature 'pulls back the reins' (*refrenat*, 1.1121) of growth, causing things to decline to the final limit of death.

As we survey the infinite universe, then, we see particular worlds marked off by fixed boundaries from the atoms that surround them as well as from all other worlds. Boundary-stones, moreover, dot the landscape of each world, dividing earth from sky, sparrows from eagles, humans from cattle, grass from clover. To these boundaries, we must add another, which is crucial. It is the boundary that expels the gods from the entire realm of nature's creative activity. In his table of contents at the beginning of Book 1, Lucretius promised that he would teach 'how all things come to be without the work of the gods'.²⁰ Toward the end of Book 2, he has fulfilled his promise (2.1090–2):

Quae bene cognita si teneas, natura videtur
libera continuo, dominis privata superbis,
ipsa sua per se sponte omnia dis agere expers.

If you hold on this knowledge well, nature appears free right away, rid of arrogant masters, doing all things by herself on her own, without participation by the gods.

Using the language of politics, Lucretius expels the gods from the domain of nature. This is an act of liberation from tyrants. Lucretius' Roman readers are likely to be reminded of the turning-point in their history to which they traced their political liberty, the expulsion of the tyrant Tarquinius.

Unlike the exile of humans, the exile of the gods has nothing harsh about it. Lucretius reveals it at the beginning of Book 3: the gods enjoy perfect bliss in a realm of their own, exempt from any of the disturbances that go along with the work of creation. To our map of the world, therefore, we must add another domain, the realm in which the gods enjoy perfect happiness. Like naturally created things, the gods are confined within boundaries they cannot transgress. Within these boundaries, however, they live a life that is wholly filled with happiness. Nature has so organised the universe by its treaties that it has set aside a realm of the gods to serve as a model of happiness for humans.

The most prominent reference to natural treaties in Lucretius' poem comes in the prologue to Book 5. Lucretius now sums up all his previous teachings under the rubric of 'treaty'. In the meantime, Lucretius has situated the human being within the natural world by first explaining the boundary of death (in Book 3), then outlining the powers that humans have in their lifetime (in Book 4). In his summary, Lucretius focusses on the need to submit to the conditions fixed by nature's treaties, especially the 'laws' that limit a lifetime (5.55–8):

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

...

I step in his [Epicurus'] footsteps as I set out the reasons and show by my words by what treaty all things are created, how it is necessary to endure in it and things do not have the power to break the strong laws of one's lifetime...

²⁰ 1.158 (*quo quaeque modo fiant opera sine divum*). Lucretius also signals his aim by adding the redundant word *divinitus* to the first principle of Epicurean physics. In his words, 'nothing ever comes to be from nothing by divinity (*divinitus*, 1.150)'.

Lucretius goes on to refer to his previous teachings about the birth and mortality of the soul, as well as the images of the dead, then proposes a new topic, the creation of the world. Just as in Books 1 and 2 he stressed the strength of the powers allocated by natural treaties, so now he emphasises the strength of the final limit to these powers, death. The term 'law' is linked with the demand for submission to this final limit. Similarly, he pointed out in Book 3 (686–7) that souls both have birth and are bound by a 'law of death' (*leti lege*).

When announcing his new topic, Lucretius returns to the theme of religious oppression. He will repeat the same message again in Book 6. Echoing the conclusion of Book 2, he points out that humans have taken harsh masters into their lives by assuming that the gods can do all things. Lucretius again uses the image of the boundary-stone to reiterate the main theme of his poem (5.87–90 and 6.64–6):

...
 rursus in antiquas referuntur religiones
 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.

...they are carried back into old superstitions and adopt harsh masters, whom they believe in their misery to have the power to do all things. They are ignorant of what can, and cannot be, and how there is a finite power for each thing and a deep-set boundary-stone.

To prevent backsliding, Lucretius proposes to show in detail how our world and everything in it, especially the heavenly bodies and the events that happen in the heavens, are natural creations, exempt from all divinity. In the ensuing exposition, Lucretius tells us that the gods cannot 'strive against the treaties of nature (*naturae foedera*, 5.310)' when their temples and statues crumble into decay.

While the treaties of nature establish order in the world, this order is attended by continuous strife. In the first place, the atoms that are scattered in the infinite universe clash with one another until they combine into a world system. Further, the atoms within this system continue to clash until they settle into innumerable fixed kinds. Finally, this fixing of boundaries brings a condition of stability. At the same time, each created thing continues to be engaged in strife with its neighbors. This competition is vital to the existence of each created thing; for it receives reinforcement from its neighbours, just as it gives up something of itself to them. In particular, the elemental masses of fire, wind and water fight one another in a war that, Lucretius tells us, has nothing godlike about it (*pio nequaquam concita bello*, 5.381). Overall, birth is linked to death in an everlasting, equal contest (2.573–80).²¹ Amid this system of regulated strife, some things are paired with one another in what looks like an unequal partnership. Lucretius gives two examples of this kind of treaty arrangement. In the human being, the soul and mind are bound by a 'treaty' (*foedere*, 3.416) that gives greater power to the mind than the soul for the preservation of life. The other example consists in the 'treaty' (6.906) that gives the magnet the power to attract iron.

These, then, are all of Lucretius' uses of the terms 'treaty' (*foedus*) and 'law' (*lex*) in relation to nature. How does his conception of natural treaties compare with that of ordinary treaties? First, as outlined previously, human treaties are agreements between two or more self-governing states. Nature's treaties set up a relationship

²¹ See also 1.262–5 and 2.75–9.

between two or more parties, each of which exercises a unique set of powers. At the most basic level, there is a separation of powers between nature and the gods. Within the realm of nature, all created kinds are held in relationship with one another. Nature is personified as presiding over these relationships; in reality, it is identical with the domain of created things and its constituents, the atoms. Second, human treaties put an end to war or promote cooperation. Nature creates things out of a condition of strife, as well as secures a balance of cooperation and strife among created things. Third, human treaties set limits to the powers of the contracting parties, while permitting the exercise of powers within these limits. Nature's treaties set limits to the powers of all things, while allowing each thing to flourish with powers of its own. Fourth, human treaties must be respected. Nature's treaties are kept without fail.

Along with the similarities, there is a basic difference. Natural treaties are not deliberate. Lucretius explicitly warns the student against thinking that the atoms 'have made compacts' with each other.²² Instead, they fall spontaneously into enduring patterns as the result of clashing with each other in countless ways. Lucretius seems intent on blocking a misunderstanding of the term 'treaty' by pointing out that the natural order of things is not planned by a reasoning mind. Reason enters the world only after the creation of things by natural treaty. It follows that nature's treaties are necessarily kept; there is no possibility of breaking them.

Like all other things, therefore, human beings must abide by the natural conditions of their existence. Bound by the necessity of their own nature, they are incapable of violating nature's treaties. There is, nonetheless, a sense in which humans can fail to respect nature's treaties. For unlike other created things, humans have the power to understand nature's treaties. Although they must abide by them, they have the option of recognising the need to abide by them, or not. Joined to the theme of limits, there is another theme in Lucretius' poem which is just as prominent. This is the theme of enlightenment. Just as Lucretius keeps repeating that there is a fixed boundary to the power of things, as determined by natural treaty, so he keeps reminding us that we are just like children, frightened in the dark, and that this darkness and terror must be dispelled by the light of reason. What we must learn is the necessary conditions of our existence, as determined by treaty. Knowing these conditions, we will be able to use them in such a way as to attain happiness. Although we had no choice in making the treaties, we have the choice of respecting them. It is difficult to get to know nature's treaties and even more difficult to keep them firmly in mind. Yet all our happiness depends on respecting them with inviolable good faith.

I now turn to the second part of the paper, the organisation of Lucretius' poem as an ethical text. As David Sedley has shown, Lucretius modelled the order of his physical presentation on the order in which Epicurus presented his physical doctrines.²³ Sedley also suggests that Lucretius increasingly sought to restructure Epicurus' physics in a radically different way.²⁴ To my mind, the differences are so radical as to transform a physical text into an ethical text. Although Lucretius observes, in large part, the order of Epicurus' physical exposition, he gives a fundamentally different structure to his poem. He devotes the two central books of his poem, Books 3 and 4, to the nature of the human being. These two books are

²² 5.421 (*pepigere*), cf. 1.1023.

²³ D. Sedley, 'How Lucretius composed the *De rerum natura*', in Algra et al. (edd.) (n. 1), 1–19, and *Lucretius and the Transformation of Greek Wisdom* (Cambridge, 1998), 134–65.

²⁴ Sedley (n. 23), *Lucretius and the Transformation of Greek Wisdom*, esp. 155–7.

flanked, on the one side, by Books 1 and 2, which survey the nature of the entire universe, and, on the other side, by Books 5 and 6, which explain the nature of this world. The poem as a whole focusses on the human being in two ways. Not only does it treat the human being as the topic of the central two books, but also it views the human being as part of the natural order of things throughout the text. As part of the natural order, moreover, humans have two roles: they are naturally created objects, exercising finite powers of their own within the natural universe; and they are cognitive subjects, exercising their special powers of cognition to recognise their place in the natural universe. The first two books show us the human being at home in the universe as a whole; the last two books show humans at home in the history and topography of this world.

Along with this restructuring, Lucretius imposes an outline of ethical doctrines on his poem. On the surface, he follows Epicurus by proposing two main aims of physical investigation: liberation from fear of the gods, and liberation from the fear of death. The only way to secure these aims is to recognise, through a study of nature, that there is nothing to fear. Lucretius proclaims these two aims in the introduction to his poem, then reminds the reader of his aims at strategic points in the rest of his poem. As Lucretius himself announces, the first two books address fear of the gods; the third and fourth books address the fear of death; and the last two books aim to prevent backsliding into fear of the gods. Liberation from these fears constitute the first two principles of Epicurus' ethics, as summarised in the first two *Authoritative Opinions*.

Unlike Epicurus, Lucretius puts forward these aims right at the beginning of his physical explanations, thus wrapping the physical exposition into an ethical message. To the two main lessons, moreover, Lucretius adds a third, that there is a limit to pleasure, which is the subject of Epicurus' third *Authoritative Opinion*. Lucretius announces this principle in the prologue to his second book. On the surface, this principle has nothing to do with the content of the second book, which is devoted to the powers of the atoms. It has everything, however, to do with Lucretius' ethical aims. Having set out the first two principles of Epicurus' ethics in the prologue to the first book, it is necessary to add the third in order to round out a complete ethical system. The first two principles promise liberation; the third sets up a positive goal, the achievement of pleasure. Lucretius subsequently gathers all three principles in the prologues to his fifth and sixth books. Focussing on Epicurus as a personal saviour, he goes on to portray the human mind as a vessel that must be purified from the corruption of both fear and desire.

The poem as a whole thus offers an ethical system based on three key doctrines. Epicurus added a fourth principle, that there is a limit to pain, which is the subject of his fourth *Authoritative Opinion*. The four *Opinions* constitute the *tetrapharmakos*, fourfold remedy, of Epicurean ethics. Lucretius omits the fourth principle.²⁵ Possibly, he might have added it later. Yet he might well have chosen to omit it in an attempt to adapt Epicurean ethics to Roman conditions. Epicurus himself gave only scant attention to the fourth principle in summarising his ethics in the *Letter to Menoeceus* (133). There are other aspects of Epicurean ethics, too, such as the hedonistic calculus and the relationship of the virtues to pleasure, that are missing from Lucretius' poem. Here, too, we may see a deliberate attempt to fashion an ethics that is suitable for the Romans.

²⁵ Sedley, *ibid.* 163, notes that the fourth principle is missing and suggests that Lucretius might have added it at a later stage in his reworking of Epicurus' teachings.

Lucretius skillfully interweaves all three key doctrines throughout his poem. In the introduction of Book 1, Lucretius links the fear of an afterlife with fear of the gods by presenting the former as a device used by the priests to hold humans in their power (1.102–11). In the prologue to Book 3, Lucretius links the fear of death with excess desire, as well as with fear of the gods. Throughout his poem, he juxtaposes or mingles the three kinds of transgression. A final example is the hopelessly confused mental state of the person who is terrified of dying by the plague: his present distress gets the better of his fear of the gods and makes him risk his own life in bloody battles with others (6.1276–86).

We may distinguish, then, between two kinds of structure: a surface structure, which follows roughly the order of Epicurus' physics and proposes two ethical goals; and a deeper structure, which combines physics and ethics into a comprehensive ethical system. This union of physics and ethics, I suggest, is underpinned by a conceptual mapping of the physical universe into domains of power demarcated by nature's treaties. The human being is at the heart of this map. Humans are liberated, in the first place, by the expulsion of the gods beyond the boundaries of created things and, second, by the limits placed on their lifetime. Along with setting these limits, the treaties of nature enable a flourishing of powers within a lifetime. The distinguishing power of humans is reason, together with the power to achieve happiness through reason. The full exercise of these powers demands not only a recognition of the limits of divine power and one's lifetime; it also requires a recognition of a limit to pleasure. As Lucretius puts it, humans must understand 'what is the limit of possession and, in short, to what point true pleasure grows' (*quae sit habendi finis et omnino quoad crescat vera voluptas*, 5.1432–3). To achieve happiness, therefore, a human being must recognise three main kinds of boundaries as demarcated by nature's treaties: a boundary to the power of the gods, a boundary to one's lifetime and a boundary to pleasure. Although Lucretius does not use the term 'treaty' specifically with respect to the boundary of pleasure, his general doctrine on the limit of powers implies that this, too, is a boundary determined by nature's treaties.

How, then, does the notion of treaty underpin the ethical structure? Let us go back to the beginning of the poem. The first two books lay the groundwork. Along with his announced purpose of setting a limit to the power of the gods, Lucretius shows humans the boundaries of their own existence within the realm of nature. From the very beginning of his physical exposition, he views humans as part of a natural cycle of creation and destruction, sharing the world with all other created things as a common home. Turning myth to his own use, he constructs a new parentage for the things of this world. The rains from the sky-father penetrate the earth-mother, who gives birth to plants and animals: human children make cities flourish, as birds sing in the leafy woods and young animals gambol in the meadows, inebriated by the milk flowing from swollen udders (1. 250–61). Toward the end of Book 2, Lucretius reminds us of this common home and parentage: all living things 'are sprung from celestial seed, we all have the same father, from whom the nourishing earth, the mother, receiving liquid drops of moisture, gives birth...' (2.991–4).

This story of birth is accompanied by a story of destruction, which encompasses humans along with all other created things. Like other animals, humans are like runners passing on the 'torch of life' (2.79). Early in Book 1, Lucretius shows us ploughmen turning fertile clods of earth in order to prod matter into life (1.208–14). Balancing this picture, Lucretius ends Book 2 by focussing on an aged ploughman, together with a grower of vines, lamenting the decline of their crops in a declining

world (2.1164–74). Serving as a common home, the world in which we live holds all things in a cycle of birth and destruction within the boundaries of its own birth and destruction.

This view of the human being as a finite part of nature underlies Lucretius' arguments on death in Book 3. Instead of focussing only on the final boundary of death, Lucretius consistently allocates to humans a finite stretch of time, bounded by both birth and death. Viewing human life as a bounded whole, Lucretius offers a type of argument not found in the extant writings of Epicurus. This is the so-called symmetry argument: just as the time before birth was nothing to us, he argues, so the time after death will be nothing to us.²⁶ The fact that we have only a tiny space of time in the infinite expanse of time makes it all the more urgent for us to fill our lives with pleasure. Lucretius brings nature on the scene in person to remind humans that she has provided them with ample advantages (3. 931–62). She berates both young and old – the old more stridently than the young – for letting go of the good things she pours into each life: instead of enjoying what is present, they forever yearn for something more. Lucretius caps nature's admonitions by reminding the reader in his own voice of the lesson that he taught in Books 1 and 2: all things must give up life in order to make way for new births (3.963–71).

Following Epicurus' teachings, Lucretius recognises two main reasons for the fear of death: one is that we fear pain in the after-life, especially the punishments traditionally associated with Hades; the other is that we fear an end to the pleasures of life. On this basis, however, Lucretius builds an altogether new view of human distress. This is a multifaceted picture of self-alienation. He shows us a self-divided individual, projecting his life into a non-existent future as he bemoans the troubles that will befall his 'other self' after death (3.870–87). Recalling humans to this life, he transfers the mythical punishments of the underworld to this life, cramming this life with the agonies of a person who pursues the wrong goals (3.978–1023). He depicts another form of alienation in the form of the wealthy proprietor who keeps running off to his country villa to escape the burden of his unhappiness in the city, then either collapses in self-oblivion or returns in haste. In this way, Lucretius points out, 'everyone flees himself', while clinging none the less to himself as an object of loathing (3.1060–70).

As Charles Segal has emphasised, Lucretius gives much attention to the violation of corporeal boundaries.²⁷ Lucretius depicts the agonies of corporeal maiming and dissolution very vividly throughout his poem. While recalling humans to this life, Lucretius does not spare them a recognition of the harsh reality of life. But this only makes it more important for humans to heed Lucretius' teachings. Although the boundaries of nature are fixed in such a way that there is continual aggression, their fixity is wholly inviolable: they cannot be transgressed. Even if physical pain is inevitable, humans can escape the pain of mental anxiety by recognising this inviolability.

Drawing boundaries around our lifetime, Lucretius does not simply show that death is nothing to us: he insists, above all, that our life is everything to us. Nature presides over this domain; the gods are left wholly out of it, except as models for our own self-fashioning. Unlike the gods of myth, nature is not a tyrant. It is nothing but

²⁶ 3.830–42 and 972–7. This argument has received much attention in recent decades; see J. Warren, *Facing Death: Epicurus and his Critics* (Oxford, 2004), 57–108.

²⁷ C. Segal, *Lucretius on Death and Anxiety: Poetry and Philosophy in De rerum natura* (Princeton, 1990), 115–70.

things themselves, operating with certain finite powers. Our nature, in particular, includes the power to fashion our own happiness. As Epicurus emphasises in the *Letter to Menoeceus* (133–5), there is something in our power; we are not the slaves of necessity, or chance, or the gods. All of Epicurean ethics is based on this assumption. Lucretius explains that the atomic swerve saves us from necessity.²⁸ Just how the swerve brings about this freedom is not within the purvey of this paper. It is sufficient to note, first, that the swerve is entirely compatible with the existence of fixed boundaries and, second, that, like Epicurus, Lucretius bases his entire educational enterprise on the belief that humans can achieve happiness through the exercise of their rational powers.²⁹ In particular, Lucretius points out, we are not constrained by the original composition of the soul atoms. The original proportion of fire, air and wind atoms in the soul determines whether a person has a predisposition to anger, passivity or fearfulness. Reason (*ratio*), however, can bring it about that the traces left by our original nature are 'so small that nothing prevents us from living a life worthy of the gods' (3.319–22).

Books 3 and 4 mark a major departure from the order of Epicurus' presentation of his physical doctrines. The unfinished beginning of Book 4 offers a remarkable window into the process by which Lucretius turned Epicurean physics into ethics. As Sedley and others have observed, the text provides evidence that Lucretius originally intended to follow up Book 2 with an explanation of *eidola* (Latin *simulacra*), the images by which we see and think.³⁰ This would be in keeping with Epicurus' own arrangement of topics in the *Letter to Herodotus*. Here, Epicurus treats sense perception (sections 46–53) before he turns, after a substantial interval, to an explanation of the soul (sections 63–8). In his introduction to Book 4, moreover, Lucretius proposes to explain the *eidola* in order to remove the fear of death. This is in agreement with the plan that he announced in the introduction to Book 1 (1.127–35). As it turns out, however, Lucretius devotes only a very small section of Book 4 (757–67) to this problem. For the rest, he seems to forget about his initial aim. Instead, he focusses on the cognitive powers made possible by the *eidola*. He ends up, moreover, by putting the *eidola* to a wholly unexpected use. They foment erotic desire, bringing havoc to human lives by continually parading the beloved as an unattainable object of desire.

The whole of Book 4 complements Book 3 as an explanation of the powers that humans have by nature. The overall organisation of Books 3 and 4 mirrors that of Books 1 and 2. Just as Book 1 treats the material constituents of the universe, the atoms, and Book 2 follows up by treating the creative powers of the atoms, so Book 3 treats the constituents of the human being as a body-and-soul complex, then treats its powers. These powers consist of sense perception, thought, nourishment, movement, sleep and dreams, and reproduction. Lucretius gives primary emphasis to the powers of cognition, but also includes other powers that allow humans to function as animate

²⁸ 2.251–93. The swerve breaks 'the treaties of fate' (*fati foedera*, 2.254). By contrast with the treaties of nature, 'the treaties of fate' eliminate personal initiative, whether this is to act of one's own volition or to resist external forces. To my mind, the reference to fate is directed against the Stoics. Using his own conception of 'treaties of nature', Lucretius replaces it hypothetically with 'treaties of fate' and concludes that this notion is incoherent; for it has consequences that conflict with observed truths.

²⁹ As Long ([n. 1, 1977], 73–87, and [n. 1, 1997], 131) has argued, the operation of the swerve is compatible with the operation of laws at the macroscopic level. I would add that the operation of the swerve is itself confined to fixed boundaries, that is, a minimal deviation.

³⁰ Sedley (n. 23, *Lucretius and the Transformation of Greek Wisdom*), 137–8.

beings.³¹ Unlike Epicurus, Lucretius offers a comprehensive analysis of the human being as a domain of power, finite in its abilities, but empowered none the less to live a rationally ordered life. The analysis of human powers fills out Lucretius' conception of the human being as a naturally created kind, demarcated from all other kinds by natural treaty. The final, long section on erotic love illustrates the misuse of these powers, thus reinforcing the ethical message.

It remains for Lucretius to impress upon his student the correct use of his powers. He turns to this purpose in the prologues to the fifth and sixth books. Directing the student's attention inward to his personal state of mind, he now presents Epicurus as a moral saviour, who discovered the right of 'way of life', that is, the 'wisdom' that consists in the practice of life (5.9–12). From the dizzying vision of Epicurus as traverser of the physical universe and conqueror of religion, Epicurus now appears as a slayer of personal monsters, purging lives from domination by excess fear and excess desire. The full ethical import of Epicurus' teachings stands revealed in his aspect as a divinity who far outdoes Hercules (5.22–44).

Completing the transformation of his physics into an ethical system, Lucretius now unites the three key principles of his ethics by pairing 'the sharp cares of desire' with 'fears' (5.45–6). The same pairing occurs in the prologue to Book 6: Epicurus 'put a limit to desire and fear' (*finem statuit cuppedinis atque timoris*, 6.25). Lucretius underscores this pairing by comparing the mind to a vessel that is partly perforated and partly contaminated (6.17–23). Analogously, the mind is both perforated by insatiable desires and contaminated by unfounded fears. Fear takes away enjoyment of what is present; unbounded desire continually defers it.³²

As Lucretius himself announces, he wrote Books 5 and 6 to prevent backsliding into fear of the gods. Just as in Books 3 and 4, however, the devastation of excess desire intrudes into the exposition. Most conspicuously, Lucretius' story of the development of the arts in Book 5 is at the same time a story of the growth of desire. Lucretius achieves an especially harrowing effect by setting off the run-away escalation of desire against the gradual, step-by-step progression of the arts. Unfettered by physical constraints, desire quickly gets out of control. People are never content with what they have achieved; they are forever yearning for something more. Excess desire leads to violence and ever more horrible ways of making war. In their frenzy, humans lose sight of what they want: thwarted by others, they are willing to die if only they can inflict hurt on their enemies (5.1347–9).

Lucretius tries to arrest this frenzy not only by issuing admonitions but also by interspersing episodes of calm repose. In an idyllic depiction of agriculture, he shows us a life at peace, with one field bounded against another in a gently undulating landscape (5.1370–8); and he animates the countryside with rustics, enjoying each other's company with ample food, jokes, singing and dancing (5.1379–1411). By contrast, we see humans rushing ferociously into self-destruction as they unleash wild

³¹ These powers are Aristotelian, as F. Solmsen ('*Ἀισθησις* in Aristotelian and Epicurean thought', *Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde* 24 [1961], 241–62, at 20–2) showed. Speech, one of eight functions recognised by the Stoics (along with the five senses, reproduction and the mind), does not receive separate attention in book 4.

³² In *Authoritative Opinion* 11, Epicurus pairs fear of the heavens and death with the failure to recognise a limit to pain and desire. Lucretius, it appears, reformulates this diagnosis, which forms the basis of Epicurus' *tetrapharmakos*, by pairing fear with the failure to recognise a limit to desire (alone). Epicurus points out in *Authoritative Opinion* 12 that fear concerning the most fundamental matters corrupts pleasures.

animals on their enemies, not caring whether the animals will turn on themselves instead (5.1302–49). The rural scenes represent a life within boundaries; the fury of war represents a life that lurches far beyond any boundaries. Excess desire reaches its culmination in the destruction of the self, whether physical or moral, as well as the destruction of others. It is no less a transgression against nature's treaties than a belief in divine intervention or life after death.

This view of the natural order of things is universally valid: everywhere, regardless of national boundaries, humans are endowed by nature with a life that must observe certain natural boundaries. Lucretius underscores this universality by offering numerous Greek examples along with Roman examples. The two framing examples, the brutal murder of Iphigeneia and the chaos of the plague at Athens, are taken from Greek mythology and history. At the same time, Lucretius sees the condition of humans from a Roman perspective. His view of human misery and dignity is thoroughly imbued with Roman assumptions. To see how, we need to return briefly to the beginning of the poem.

In the prologue to Book 1, Lucretius shows the monster of religion pressing down on humans from the sky. This monster has a Roman aspect. The Romans made a point of consulting the will of the gods on matters of public policy, including the holding of meetings and the operation of military expeditions. In Polybius' judgement, the Romans were more superstitious than any other people.³³ Lucretius himself shows us Roman religion in action in a long, highly polemical passage in Book 6 (379–422), where he derides the attempt to ascertain the will of Jupiter by using Etruscan sacred books to interpret thunderbolts.³⁴ For Lucretius' Roman reader, the skies are full of omens. The flaming walls that Epicurus breaches on his way to outer space represent the religious constructs by which the Romans girded their political community.

In the second prologue, a person looks down from the fortification of wisdom upon people who are astray. He observes people battling storms at sea and fighting wars in the plain. Although what he sees is an indiscriminate mass of 'others', Lucretius is especially concerned with the leaders of such futile endeavours. The wrong way of life, he explains, is to keep struggling, with all the powers of one's intellect and family connections, to climb to the summit of wealth and power (2.11–13). Later in the prologue (2.40–6), he explains the futility of commanding legions in exercises of war: this, he says, won't chase away fear of the gods or of death.³⁵ Joined to the first prologue, the second rounds out a picture of Roman political life. The Roman state is both oppressed by religion and driven by a struggle for wealth and power.

The prologue to the third book sharpens the misery, while heightening the bliss of salvation. It begins with an ecstatic vision of the universe, showing a domain of the gods that is perfectly at peace and no Hades. Constructing his own etiology of human passions, Lucretius now holds the fear of death responsible, in large part, for the frenzied pursuit of power and wealth (3.59–64). He further links the pursuit of wealth and power to crime, exile and civil war. This etiology draws a vicious circle from the

³³ Polyb. 6.56.6–8; see Watson (n. 8), 66–71.

³⁴ K. Summers ('Lucretius and the Epicurean tradition of piety', *Classical Philology* 90 [1995], 32–57) argues convincingly that Lucretius views the oppression of religion from a Roman point of view.

³⁵ At 5.1226–32, Lucretius fills out the thought by showing us the commander of a fleet swept from his ship while praying desperately to the gods.

fear of death to a condition which the Romans regarded as next to death, exile. In Lucretius' lifetime, Roman politicians notoriously pursued wealth and power by means of crimes that frequently led to exile; and they devastated Rome with the ravages of civil war.

At this point, Lucretius has made clear that he wants to free the Romans from their particular obsession with power, wealth and the gods. He rounds out this picture in the remainder of the poem. He jolts the Romans with a reference to the rods and axes, the symbol of supreme political power, in his depiction of the torments of the underworld (3.996). Just as Sisyphus is forever doomed to labour in vain, so the Roman politician keeps struggling for one political office after another in a futile attempt to get hold of supreme power. In Book 4 Lucretius gives lavish attention to another obsession that the Romans well recognise: the dissipation of the lives of young men in the pursuit of erotic excess.³⁶ Along with an implicit denunciation of Roman luxury, the story of civilization in Book 5 draws attention to what is perhaps the crowning obsession: the pursuit of war. The contrast between a harmonious agricultural life and the frenzy of war has special significance for the Romans, who traditionally partitioned their lives between farming and making war. Lucretius sees war as the result of excess desire. It is ignorance of the 'limit of possession', in particular, the limit of the growth of pleasure (5.1432–3), that drove people into the abyss of war (5.1434–5):

'This carried life little by little into the deep and stirred up from the bottom great surges of war.'³⁷

Lucretius interweaves Roman habits of piety, ambition, wealth and war into a fiendish web of despair and self-annihilation. The way out is to replace traditional structures with natural boundaries.

In Lucretius' lifetime, another philosophical system vied for the allegiance of the Romans. The Stoics, too, sketched out a place for the human being in the natural world. As Cicero puts it in his work *On the State* (*De republica* 1.19), we have a home

'that is not bounded by our house walls, but is this entire world, which the gods have given us as a home and fatherland in common with themselves.'³⁸

This cosmic home is governed by a rational force, which is identical with the will of god. This force extends throughout nature as law. Humans are called upon to obey this cosmic law in order to achieve happiness; they err by disobeying it. The Epicurean universe, too, is governed by law. I agree with Tony Long that Lucretius offers a counterpart to the Stoic conception of law.³⁹ As I have attempted to sketch, this is a fundamentally different view. What makes the difference is that Lucretius ties laws to 'treaties' (*foedera*), an ordering that sets fixed boundaries to powers. On the Stoic view, humans are called upon to obey commands and prohibitions that set them on a straight path. In Lucretius' view, nature calls on humans to respect the boundaries of their own powers together with the boundaries of all other things. This respect constitutes the integration of humans in nature. By conceptualising the laws of nature

³⁶ See W.R. Johnson, *Lucretius and the Modern World* (London, 2000), 40–6.

³⁷ *idque minutatim vitam provexit in altum / et belli magnos commovit funditus aestus.*

³⁸ *quae non ea est, quam parietes nostri cingunt, sed mundus hic totus, quod domicilium quamque patriam di nobis communem secum dederunt.*

³⁹ Long (n. 1, 1997), 134–7.

as setting limits to powers, Lucretius frees human beings from traditional constraints, while showing them the possibilities that are open to them. These possibilities are, to be sure, law-governed. At a physical level, the possibilities are implemented or not according to fixed powers. From a moral point of view, however, there is a fundamental difference between viewing the laws of nature as setting out domains of power, having fixed limits, and seeing them as prescribing what must be done. As Lucretius tries to persuade the reader, nature sets out enabling conditions rather than constraints. By comparing the natural order of things to treaties, he invites the reader to place himself in the natural landscape of the world as an inhabitant who is free to use his powers within limits.

I will end by casting a brief glance at a part of Lucretius' poem that I have not yet touched on. This is the preface to the whole poem, the invocation to Venus. Much has been written about the meaning of this prologue. I would like to add one more suggestion. The first two words of the poem invoke Venus as 'mother of the sons of Aeneas' (*Aeneadum genetrix*). Toward the end of the invocation we see Mars, the god of war, in the arms of Venus, looking up at her with avid gaze. Mars was traditionally viewed as ancestor of the Romans in his guise as father of Romulus, founder of Rome. Lucretius proposes a more distant progenitor – Venus, goddess of love and pleasure, and mother of Aeneas, a Trojan. To make this lineage reputable, he refers to the Romans by the heroic patronymic *Aeneadum*. The Romans are to live the life of heroes, just as Epicurus was a hero, by pledging allegiance to Venus, conqueror of Mars. Venus pours sweet words into the supine Mars, begging peace for the Romans. Lucretius' poem, too, calls for peace, a peace that comes from observing a limit to fear and greed by recognising the natural order of the world.

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