Hierher gehört wohl der Vers[37] *quapropter deliro et cupidi officium fungor liberum*[38]. Nun darf man ihn, wenn man ihn einem Interlocutor gibt, der die Ansicht des Metellus vertritt[39], natürlich nicht an den Schluß der Satire setzen[40]. Hier gibt jemand zu, daß er vom »Rechten« (*rectum, lira*) abweicht[41], daß er Unsinniges tut, indem er heiratet, um Kinder zu zeugen: das ist ein vorzügliches Beispiel für, wie wir meinen, Juppiters Lehre, daß die Menschen die *molestia* und *aerumna* der Ehe im vollen Bewußtsein ihres Tuns auf sich nehmen und folglich kein Recht haben, Götter oder Schicksal anzuklagen und sich selbst zu bemitleiden. Daher könnte man sich diesen Vers auch sehr gut am Anfang der Satire bzw. in unmittelbarer Nachbarschaft[42] zur Juppiter-Rede vorstellen[43].

Freiburg i. Br. KONRAD HELDMANN

[37] Fr. 686 M = 643 Kr.

[38] Dies die allgemein akzeptierte Konjektur von MARX. Bliebe man bei *uberum*, so müßte man daran denken, es mit Hinweis auf die von Cicero beschriebenen Statuetten zu erklären und in die Juppiter-Rede zu setzen; das ist aber wohl kaum möglich.

[39] Dies die übliche Auffassung.

[40] MARX und KRENKEL setzen ihn ans Ende der erhaltenen Verse.

[41] Dies die Erklärung des Nonius, der wir die Überlieferung des Verses verdanken.

[42] Dies ist die von WARMINGTON gewählte Reihenfolge, der den Vers unmittelbar an Fr. 678/79 M = 634/35 Kr anschließt: 644 – 646 W (Remains of Old Latin III, 1967).

[43] MARX vertritt die Affassung, daß uns in Juvenals 6. Satire eine Nachahmung der Ehesatire erhalten ist (MARX II, 247 zu Fr. 678/79: Iuv. 6, 28 ff.). Das ist sehr gut möglich und dokumentiert, daß wir in 681 M = 638 Kr durchaus nicht gezwungen sind, ein lateinisches Äquivalent zu »früher wünschte sich eine Frau noch ...« zu ergänzen. CICHORIUS, der diesen Vorschlag gemacht hat (man ist ihm darin allgemein gefolgt), hat daran dann die Vermutung geknüpft, Lucilius sei kein prinzipieller Gegner der Ehe gewesen, sondern habe nur die Frauen der Gegenwart und die der guten alten Zeit gegeneinander ausgespielt. Aber wie Juvenal und übrigens auch Plautus (Mil. 685 f.) zeigen, kann man sich den Gedanken auch sehr gut negiert oder als irrealen Wunsch vorstellen, und das ist auch hier sicher noch wirkungsvoller (zu CICHORIUS 135).

LUCAN'S IMAGERY OF COSMIC DISSOLUTION

It is widely recognized today that Lucan's philosophical orientation was predominantly Stoic. A number of important studies published during the past hundred years have illuminated not only his general debt to contempo-

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rary Stoic theory[1], but also his characteristic handling of particular Stoic notions – those of *fatum* and *fortuna*[2], for example, or of suicide[3], or of divination[4]. Yet one aspect of Lucan's Stoicism has never been adequately discussed: his debt to Stoic cosmological theory[5]. It is true that there have been a number of ingenious attempts to explain certain features of the Pharsalia in terms of Stoic cosmology[6]; but these attempts have proved unconvincing largely because their authors had an insufficient knowledge of Stoic doctrine at first-hand[7]. In recent years, however, there has been renewed interest in Stoic theory, particularly in Stoic cosmology[8], and consequently we are

[1] See particularly F.OETTL, Lucans philosophische Weltanschauung, Brixen, 1888; R. PICHON, Les sources de Lucain, Paris 1912, 165 – 216; and E. E. SIKES, Roman Poetry, New York 1925, 194 – 209. The more recent essay by O. S. DUE, Lucain et la philosophie, in Entretiens Fondation Hardt XV: Lucain, Geneva 1970, 203 – 224, is a finely-balanced assessment of Lucan's debt to Stoicism.

[2] There is the older study by I. E. MILLARD, Lucani sententia de dis et fato, Diss. Utrecht 1891; see now the studies by W. H. FRIEDRICH, Cato, Caesar und Fortuna bei Lucan, Hermes 78, 1938, 391 – 423, and B. F. DICK, Fatum and Fortuna in Lucan's Bellum Civile, Classical Philology 62, 1967, 235 – 242.

[3] See W. METGER, Kampf und Tod in Lucans Pharsalia, Diss. Kiel 1957; partly reptd. in Lucan, ed. W. RUTZ, Darmstadt 1970, 423 – 438; W. RUTZ, Amor mortis bei Lucan, Hermes 78, 1960, 462 – 475; O. SCHÖNBERGER, Untersuchungen zur Wiederholungstechnik Lucans, Diss. Heidelberg 1961, 217 – 223; and W. HEYKE, Zur Rolle der Pietas bei Lucan, Diss. Heidelberg 1970, 147 – 154.

[4] See O.SCHREMPP, Prophezeiung und Rückschau in Lucans Bellum Civile, Zürich 1964; B. F. DICK, The Technique of Prophecy in Lucan, TAPhA 94, 1964, 37 – 49; *idem*, The Role of the Oracle in Lucan's De Bello Civili, Hermes 93, 1965, 460 – 466; and discussion in M. P. O. MORFORD, The Poet Lucan, Oxford 1967, 59 – 74.

[5] There are cursory remarks on this subject in a number of German dissertations: L. EKKARDT, Exkurse und Ekphraseis bei Lucan, Diss. Heidelberg 1936, 50 – 62; F. KÖNIG, Mensch und Welt bei Lukan im Spiegel bildhafter Darstellung, Diss. Kiel 1957, H. P. SYNDIKUS, Lucans Gedicht vom Bürgerkrieg, Diss. Munich 1958, 82 – 85; and H. A. SCHOTES, Stoische Physik, Psychologie und Theologie bei Lucan, Diss. Bonn 1969.

[6] Notably B. M. MARTI, The Meaning of the Pharsalia, AJPh 66, 1945, 352 – 376, esp. pp. 356 *sqq.* (on Stoic cosmology); see also the reply to MARTI's views by O. S. DUE, An Essay on Lucan, C & M 23, 1962, 68 – 132, esp. pp. 108 *sqq.*

[7] Even the recent book by F. M. AHL, Lucan, An Introduction, Ithaca, N. Y. 1976, which contains much fine perception and insight into Lucan's poetry, is wildly misleading on the very few occasions where it ventures a view on Stoic physical theory (e. g. p. 85, where placation of the dead by human blood is justified, incredibly, in terms of Stoic πνεῦμα-theory; or p. 100, where Antaeus' revival through contact with the land of Africa is similarly explained by recourse to πνεῦμα-theory). I should add that AHL's critical observations at these points are in no way vitiated by his misunderstanding of Stoic theory.

[8] This renewed interest in Stoic physics and cosmology is due in part to the provocative study by S. SAMBURSKY, The Physics of the Stoics, London 1959, a book which should be used with extreme caution. More recent studies include: L. BLOOS, Probleme der stoischen Physik, Hamburg 1973; M. LAPIDGE, ἀρχαί and στοιχεῖα: A Problem in Stoic Cosmology, Phronesis 18, 1973, 240 – 278; A. LONGRIGG, Elementary Physics in the Lyceum and Stoa, Isis 66, 1975, 211 – 229;

now in a stronger position to appreciate Lucan's debt to this aspect of contemporary Stoicism. It can be shown, I think, that Lucan was thoroughly conversant with Stoic cosmology as it was represented by his contemporaries, and also that his familiarity with this cosmology found expression in a recurrent series of images which one might call (for sake of convenience) the imagery of cosmic dissolution. I shall attempt to show that this imagery of cosmic dissolution is central to the meaning of the first seven books of the Pharsalia.

In order to understand the nature of this imagery in Lucan, it is necessary to explore briefly its origins in Stoic cosmological theory. The Stoic thinker whose cosmological theories are most easily accessible today is Chrysippus[9] (c. 280 – c. 205 B. C.). Though none of his voluminous writings survive, Chrysippus was the most prolific of the early Stoics, and in many ways he was also the most imaginative and innovative[10]. When ancient critics wished to attack a particular Stoic doctrine, it was almost invariably the doctrine of Chrysippus which they singled out, with the result that we are much better informed concerning his teaching than that of his two more shadowy predecessors, Zeno and Cleanthes. From the rather incomplete record of early Stoicism which survives, it would appear that the cosmological doctrine of Chrysippus supplanted that of his predecessors, that because of its sublety it posed the most serious threat to critics of Stoicism, and that, because of its comprehensiveness it was transmitted, albeit piece-meal, to successive generations of Stoics at Rome[11]. For these reasons, it is appropriate to begin by describing the cosmology of Chrysippus.

The central doctrine of Chrysippus' cosmology was that concerning the cosmic πνεῦμα[12]. For his predecessors, Zeno and Cleanthes, the principal cosmic agent had been creative fire (πῦρ τεχνικόν). However, the conception of

A. GRAESER, Zenon von Kition: Positionen und Probleme, Berlin 1975, pp. 82 – 124; R. B. TODD, Alexander of Aphrodisias on Stoic Physics, Philosophia Antiqua 28, Leiden, 1976; and D. E. HAHM, The Origins of Stoic Cosmology, Columbus, Ohio 1977. There are also two studies in the recent volume entitled The Stoics, ed. J. M. RIST, California U. P., 1977: M. LAPIDGE, Stoic Cosmology, pp. 161 – 185; and R. B. TODD, Monism and Immanence: The Foundations of Stoic Physics, pp. 137 – 160.

[9] The most accessible discussion of Chrysippus is that by J. B. GOULD, The Philosophy of Chrysippus, Philosophia Antiqua 17, Leiden, 1971; see also H. von ARNIM, RE, s. v. Chrysippos.

[10] The surviving fragments of Chrysippus have been collected and edited by H. von ARNIM, Stoicorum Veterum Fragmenta [hereafter SVF], 4 vols., Leipzig 1905 – 1924. Vols. II and III contain the fragments of Chrysippus; vol. IV consists in word-indices compiled by M. ADLER.

[11] cf. discussion by von ARNIM, SVF I, pp. v *sqq.*; M. POHLENZ, Die Stoa, 2 vols., Göttingen 1959, I, 30 – 32; and by GOULD, The Philosophy of Chrysippus, 9 – 17.

[12] In general see discussion by POHLENZ, Die Stoa, I 73 – 75; G. VERBEKE, L'évolution de la doctrine du pneuma, Paris, 1945, 61 – 90; SAMBURSKY, Physics of the Stoics, 21 – 48; GOULD, The Philosophy of Chrysippus, 99 – 102; TODD, Alexander of Aphrodisias on Stoic Physics, 34 – 49; and HAHM, The Origins of Stoic Cosmology, 157 – 174.

creative cosmic fire brought many difficulties in its train, particularly concerning the question of cosmic stability[13]. Chrysippus attempted to solve these difficulties with his conception of a cosmic πνεῦμα. Earlier Stoics had taught the notion of a bodily πνεῦμα (a notion derived ultimately from Aristotle[14]), and had also conceived of the universe as a living being (ζῷον)[15], but Chrysippus was apparently the first to see that the concept of bodily πνεῦμα, through which the animate body was held together and vitalized, could be applied by analogy to the universe[16]. Just as the bodily πνεῦμα held all bodily parts together by creating an internal tension (τόνος), so Chrysippus argued that the universe was held together by the coherent force and tensional movements of the all-pervasive cosmic πνεῦμα[17]. This conception disposed of earlier Stoic theories concerning cosmic stability which had been based primarily on gravitational movements (the heavy elements counterbalancing the light, etc.). For Chrysippus, the cosmos was stable because it was pervaded by continuous cosmic πνεῦμα which created an internal pneumatic tension between all its parts. Similarly, it would appear, Chrysippus taught that the cosmic conflagration (ἐκπύρωσις)[18] which occurred at periodic intervals could only take place through the 'release' (ἀνάλυσις) of this pneumatic tension. In short, for Chrysippus, the universe maintained its structure and coherence through the tension created by cosmic πνεῦμα; when this tension was released, the universal conflagration would result.

One of the most original features of Chrysippus' cosmology is the language in which it is expressed. His doctrines were frequently buttressed with elaborate demonstrations from medical, physical and chemical theory, and it is not surprising that he should have taken over and adapted the terminology of these disciplines. More often, however, he would coin a series of terms to make clear the novelty of his conceptions. On a number of occasions, too, he

[13] See my discussion in Phronesis 18, 255 – 257.

[14] See W. JAEGER, Das Pneuma im Lykeion, Hermes 48, 1913, 29 – 74; W. WIERSMA, Die aristotelische Lehre vom Pneuma, Mnemosyne 3rd ser. 11, 1943, 102 – 107; and F. SOLMSEN, The Vital Heat, the Inborn Pneuma and the Aether, JHS 77, 1957, 119 – 123. The classic study of bodily πνεῦμα is that by F. RÜSCHE, Blut, Leben und Seele, Paderborn 1930. Evidence for the Stoic doctrine of the bodily πνεῦμα is found at SVF I, 135 – 138, 151, 521 and 523.

[15] The notion that the universe is a living being was stated clearly by Plato, Timaeus 30b, but the notion is an ancient one; see SVF I, 110 – 114 and II, 633 – 645, and discussion by HAHM, The Origins of Stoic Cosmology, 63 – 64.

[16] I have discussed the question of the originality of Chrysippus' cosmic πνεῦμα at some length in The Stoics, ed. J. M. RIST, 168 – 173; *cf.* my remarks in Phronesis 18, 1973, 273 – 276, and the remarks of HAHM, The Origins of Stoic Cosmology, 158 – 165.

[17] On Stoic τόνος-theory see L. STEIN, Die Psychologie der Stoa, Berlin 1886, 30 – 38; SAMBURSKY, Physics of the Stoics, 29 – 33; BLOOS, Probleme der stoischen Physik, 65 – 73; and HAHM, The Origins of Stoic Cosmology, 165 – 173.

[18] SVF II 596 – 632; and see my discussion in The Stoics, ed. J. M. RIST, 180 – 184.

would devise a striking metaphor to illustrate a theory under discussion[19]. The creative ingenuity of Chrysippus' cosmological language thus distinguishes it from that of his predecessors. In order to communicate something of the unity and coherence of his universe, for example, he coined a parallel series of verbs and nouns with the prefix συν-. Hence, the all-pervasive cosmic πνεῦμα was described by Chrysippus as 'containing' (συνέχω and its compounds[20]) the entire (σύνολος)[21] universe; cosmic stability was correspondingly described as συνέχεια[22] or συνοχή[23] or συμμονή[24]. Similarly, because all things were cognate parts, as it were, of the one living being which was the universe, Chrysippus was able to speak of cosmic συμφυΐα[25]; and because all parts of the living universe were filled with cosmic breath or πνεῦμα, Chrysippus devised the term συμπνέω to describe the cosmic breathing process, and could speak of a cosmic σύμπνοια[26]. From medical theory Chrysippus borrowed the metaphorical notion that all parts of a living body were in 'sympathy' (συμπαθέα) with one another, whence he could speak of cosmic 'sympathy', συμπάθεια[27]. And because the cosmic πνεῦμα created a tension in all things which held the universe in its spherical shape, Chrysippus could speak of the resultant cosmic tension as συντονία[28]. Chrysippus also devised a series of metaphors to describe the cohesive force of his cosmic πνεῦμα. Thus he spoke of this πνεῦμα as a 'bond' or δεσμός '... which holds together all (cosmic) parts and binds them, preventing them from separating'[29]; in another report of Chrysippus'

[19] The metaphor of the δεσμός to illustrate the pneumatic tension of the universe is a case in point; in other cases Chrysippus' language, although it was used by later writers in a metaphorical sense, was apparently intended literally by him (e. g. συνέχω). I should like here to record my gratitude to Professor R. B. TODD for discussing this aspect of Chrysippus' cosmology with me.

[20] SVF II 368, 439 – 441, 447 – 449, 540, 545, 551 – 553, 911, etc.

[21] SVF II 448. [22] SVF II 441, 465, 473, 948.

[23] SVF II 441, 550; cf. III. 7 (Apollodorus).

[24] SVF II 550, 1105; cf. II. 441 (συμμένω) and 473.

[25] SVF II 546, 550, 774, 778; cf. II. 366.

[26] SVF II 411, 543, 912.

[27] SVF II 411, 441, 473, 475, 532, 546, 912. In earlier times K. REINHARDT, Kosmos und Sympathie, Munich, 1926, 51 – 54 and 92 – 121, and RE s. v. Poseidonios 3. argued tendentiously that not Chrysippus but Posidonius was the inventor of the Stoic theory of cosmic sympathy. Reinhardt's arguments were based principally on the fact that later accounts of cosmic sympathy which embraced not merely physical but also astrological, geographical and medical observations could only have derived from so many-faceted a scientist as Posidonius. In advancing this claim REINHARDT was obliged to overlook those testimonies (as cited above) where the theory of cosmic sympathy is attributed *nominatim* to Chrysippus; *cf.* M. LAFFRANQUE, Poseidonios d' Apamée: essai de mise au point, Paris 1964, 332 – 345.

[28] SVF II 543; *cf.* Chrysippus' own words in SVF II, 911 where he employs the verb συντείνω several times. Other compounds based on τείνω which were evidently coined by Chrysippus include ἀντιπαρέκτασις (from ἀντιπαρεκτείνεσθαι) and συνέντασις (from συνεντείνεσθαι); see R. B. TODD, Συνέντασις and the Stoic Theory of Perception, Grazer Beiträge 2, 1974, 251 – 261.

[29] SVF II 719; *cf.* I 106 and II 458 and 802.

teaching, the 'bond of breath' (δεσμὸς πνεύματος) is said to be responsible for binding together all things (συνδούμενα)[30]. A related feature of Chrysippus' cosmological system, the notion of fate, was also illustrated by the terminology of binding. The very word for fate, εἱμαρμένη, was derived etymologically in Stoic text-books from the word εἱρμός, 'chain'[31], whence fate was conceived as a 'chain' of interconnected material causes. Consequently Chrysippus was able to speak metaphorically of the 'weaving together' (συμπλοκή)[32] of fate. Finally, one may suspect that these various metaphors of binding are implied in the terminology which Chrysippus employed to describe the cosmic conflagration, particularly the verb ἀναλύω, which can carry with it the suggestion of 'releasing' a bond or fetters[33]. Taken together, these neologisms and metaphors will suggest something of the originality and vitality of Chrysippus' cosmological language.

Chrysippus was the last of the Stoics to devote any energy and imagination to cosmological speculations. Subsequent Stoics gave less attention to cosmology, and often rejected its most traditional features. Panaetius and Boethus of Sidon, for example, rejected the Stoic theory of cosmic conflagration (ἐκπύρωσις)[34]. The cosmology of Posidonius – however original he may have been in other disciplines – was largely traditional, and there is little evidence that he applied his versatile imagination to cosmological theory[35]. The

[30] SVF II 441; *cf.* TODD, Alexander of Aphrodisias on Stoic Physics, 215. Note that the verb employed here by Alexander, συνδέω, is yet another compound in συν- and no doubt derives from Chrysippus; cf. also SVF II 447, where πνευματικὸς τόνος is said to be the agent of a cosmic σύνδεσις. A number of Stoic sources mention the ἐπισύνδεσις or 'concatenation' of fate (SVF II 917, 918, 948, 949), and this term too is probably of Chrysippean origin.

[31] SVF II 917, 918, 920. Elsewhere fate is that which 'links together the causes of things' (αἰτία τῶν ὄντων εἱρομένη): SVF II 528, 914, 945 – 946, 948 – 949 and 978. The same metaphor of the chain, expressed by means of a compound with the prefix συν-, is preserved in other Chrysippean sources, which speak of the 'stringing together' (συνείρεσθαι) of causes: SVF II 914 and 986.

[32] SVF II 976, where εἱμαρμένη is described as the συμπλοκὴ αἰτιῶν; *cf.* II 934. Chrysippus also employed the term ἐπιπλοκή (equally preserving the metaphor of weaving) to describe fate; see especially SVF II 1000 (a *verbatim* quotation from Book IV of Chrysippus' Περὶ προνοίας recorded by Aulus Gellius), as well as II 917, 946 and 986.

[33] For Chrysippus, death was occasioned in the human body by the 'release' (ἄνεσις) of sensory tension: SVF II 767 and 876. Likewise, the 'death' of the universe was occasioned by the 'dissolution' (ἀνάλυσις) of cosmic tension, as at SVF II 596; *cf.* SVF II 602, 609 – 610, 614, 618 – 620, for various occurrences of ἀνάλυω and its compounds in the context of discussions of the Stoic ἐκπύρωσις.

[34] M. van STRAATEN, Panaetii Rhodii Fragmenta, Philosophia Antiqua 5, Leiden 1962, 19 [= frgs. 64 – 66 and 68 – 69].

[35] See L. EDELSTEIN and I. G. KIDD, Posidonius I: The Fragments, Cambridge 1972, 103 – 105, where most of the cosmological doctrines which are attributed *nominatim* to Posidonius are in fact anticipated by earlier Stoics. See also F. SOLMSEN, Cleanthes or Posidonius? The Basis of Stoic Physics, Meded. Nederl. Akad. van Wet. 24, 9, 1961, 265 – 289.

Romans, in effect, were interested in the business of this world – politics and morality – to the virtual exclusion of any interest in a mentally-constructed universe. The Roman Stoics consequently spent no time in cosmological speculations. When Epictetus on a rare occasion turns his attention to the question of cosmic order, he is content to quote Chrysippus[36]. Likewise Seneca, who expends a good deal of energy rehashing the cosmological views of his predecessors, almost never ventures an opinion of his own. By the first century A.D., in short, Stoic cosmological theory was a dead issue and had been largely forgotten.

Yet if the detail and rational of Stoic cosmological theory had been forgotten, the language devised by Chrysippus to illustrate it was very much alive. Through the writings of Cicero, who in so many ways was responsible for transmitting the theory and terminology of Greek philosophy to Roman audiences, the vocabulary of Chrysippus' cosmology would have been familiar at Rome. Cicero's most detailed exposition of Stoic cosmology, particularly that of Chrysippus, is found in the dissertation of Balbus in Book II of De Natura Deorum. There Balbus, the Stoic spokesman, draws attention to the apparent relationships between elements of the physical world, and is led to speak of the *consentiens conspirans continuata cognatio rerum* [ND 2, 19][37]. Here Cicero is conscientiously rendering Chrysippean terminology into Latin: *consentio* corresponds to συμπάσχω, *conspiro* to συμπνέω, *continuata* to συνεχής, and *cognatio* to συμφυΐα[38]. Balbus concludes this section of his discourse by observing that there could not be such interconnections between parts of the universe unless they were pervaded and held together by a divine spirit: *haec ita fieri omnibus inter se concinentibus partibus profecto non possent, nisi ea uno diuino et continuato spiritu continerentur* (ND 2, 19). Once again, the *continuatus spiritus* corresponds to Chrysippus' πνεῦμα συνεχές[39]; the verb *contineo* corresponds to the Stoic συνέχω. Elsewhere, in the De Divinatione, Cicero recurs to this Stoic notion of the inter-relationship of cosmic parts, which he describes as occurring *ex coniunctione naturae et quasi concentu atque consensu, quam συμπάθειαν Graeci appellant* (2, 34); and he goes on to specify Chrysippus among the *Graeci* who taught this doctrine. Finally, just as Chrysippus had referred to the cohesive force of cosmic πνεῦμα in metaphorical terms as a sort of bond, so too Cicero, when Balbus sums up his account of cosmic stability, translates the Greek δεσμός by Latin *uinculum*:

[36] *e. g.* Diss. I, 10, 10 and 2, 14, 25 – 26.

[37] *cf.* ND 2, 116, where (speaking of cosmic stability) the term *contentio* is an apparent calque on the Greek συντονία.

[38] cf. the remarks of A. S. PEASE in his edition of Cicero, De Natura Deorum, 2 vols, Cambridge Mass., 1955 – 1958, 596 – 597.

[39] SVF II 911 (where Galen quotes *verbatim* a passage from Book I of Chrysippus' Περὶ ψυχῆς): ἡ ψυχὴ πνεῦμά ἐστι σύμφυτον ἡμῖν, συνεχές ... etc.

nec uero haec solum admirabilia, sed nihil maius quam quod stabilis est mundus atque ita cohaeret, ad permanendum ut nihil excogitari quidem possit aptius . . . maxime autem corpora inter se iuncta permanent cum quasi[40] *quodam uinculo circumdato colligantur; quod facit ea natura quae per omnem mundum omnia mente et ratione conficiens funditur* . . . (ND 2, 115)[41].

The *natura* which here pervades the universe *mente et ratione* corresponds to that φύσις which, for all Stoics, was an equivalent term for νοῦς and λόγος, and for Chrysippus in particular was equivalent to cosmic πνεῦμα[42].

We may suppose, therefore, that the vocabulary of Chrysippus' cosmology, if not the detailed theory which underlay it, would have been familiar to an educated Roman of the first century A. D. through Cicero's treatises De Natura Deorum and De Divinatione. We must ask in particular if this vocabulary would have been familiar to Lucan. There is every reason to believe that it would. This may be demonstrated by a consideration of three particular sources from which Lucan may have become familiar with the Stoic cosmological vocabulary: from the treatise Theologia Graeca of Cornutus, his teacher; from various writings of Seneca, his uncle; and from the Astronomica of Manilius, a poet whom Lucan evidently studied with great application.

First, the Theologia Graeca[43] of Cornutus. This short treatise (composed in Greek) is an attempt to explain the traditional figures of Greek mythology in terms of physical theories which are very often recognizably Stoic. It is now widely believed that the Cornutus to whom the work is ascribed in surviving manuscripts is identical with the L. Annaeus Cornutus[44] who was the teacher

[40] PEASE, in his edition of the De Natura Deorum (p. 851), notes that Cicero employs *quasi* in passages such as this to indicate specifically that he is translating a Greek term. It is probable that Cicero here is in fact translating from a treatise of Chrysippus, for a very similar account is preserved by Arius Didymus, fr. 31 (DDG, pp. 465 – 466), and Arius Didymus attributes his account *nominatim* to Chrysippus; see HAHM, The Origins of Stoic Cosmology, 249 – 259.

[41] cf. ND 2, 119: *quae copulation rerum et quasi consentiens ad mundi incolumitatem coagmentatio naturae quem non mouet . . .*, where *copulatio* presumably renders σύνδεσις (as in SVF II 447) and *consentio* συμπάσχω.

[42] SVF II 937 (ὅτι δ' ἡ κοινὴ φύσις καὶ ὁ κοινὸς τῆς φύσεως λόγος εἱμαρμένη καὶ πρόνοια καὶ Ζεύς) and 945 (φασὶν δὴ τὸν κόσμον τόνδε . . . ὑπὸ φύσεως διοικούμενον ζωτικῆς τε καὶ λογικῆς καὶ νοερᾶς).

[43] ed. C. LANG, Leipzig 1881. In many respects LANG's edition is defective, *inter alia* because it is based on inferior manuscripts; see P. KRAFFT, Die handschriftliche Überlieferung von Cornutus Theologia Graeca, Heidelberg 1975. P. KRAFFT is preparing a new edition of Cornutus – an edition which will be most welcome.

[44] The full form of his name is known from Charisius (KEIL, Gramm. Lat. I 127). He was the author of a number of philosopical and grammatical works who was driven into exile by Nero. Fragments of his grammatical works have been collected by A. MAZZARINO, Grammaticae Roma-

of Lucan and Persius[45]; yet, oddly enough, no student of Lucan's Pharsalia appears ever to have consulted the Theologia Graeca to see if any of its doctrine has bearing on the Pharsalia[46]. Although, because of the nature of its subject and the procedure of its exposition, the Theologia Graeca is not a continuous treatment of Stoic cosmology, there are nonetheless a number of places where Cornutus employs the cosmological vocabulary I have been discussing; I think it is not an improbable assumption that Lucan would have been familiar with this vocabulary either from the Theologia Graeca itself, or from Cornutus' lectures. For example, near the beginning of his treatise Cornutus explains that, just as human beings are 'governed' by a soul, so the universe has a soul which 'holds it together' and thereby gives it life: ὥσπερ δὲ ἡμεῖς ὑπὸ ψυχῆς διοικούμεθα, οὕτω καὶ ὁ κόσμος ψυχὴν ἔχει τὴν συνέχουσαν αὐτόν, καὶ αὕτη καλεῖται Ζεύς, πρώτως καὶ διὰ παντὸς ζῶσα καὶ αἰτία οὖσα τοῖς ζῶσι τοῦ ζῆν (c. 2). The terminology which Cornutus employs here – particularly the verbs 'to govern' (διοικέω) and 'to hold together' (συνέχω) – is manifestly of Stoic origin[47]. Furthermore, the etymological derivation of the name 'Zeus' from the verb ζῆν is one that was first propounded by Chrysippus, as we learn from a doxographical notice in Arius Didymus (Χρυσίππου – Ζεὺς μὲν οὖν φαίνεται ὠνομάσθαι ἀπὸ τοῦ πᾶσι δεδωκέναι τὸ ζῆν)[48]. There is also a report by Philodemus to the effect that in the first book of his treatise Περὶ θεῶν, Chrysippus stated Zeus to be τὸν ἅπαντα διοικοῦντα λόγον καὶ τὴν τοῦ ὅλου ψυχὴν καὶ τῇ τούτου μετοχῇ πάντα ζῆν[49]; the similarities in terminology between this passage and that of Cornutus make it very probable that Cornutus was in fact following Chrysippus' (lost) Περὶ θεῶν at this point of his exposition. There are other reflections of Chrysippean theory and terminology throughout the Theologia Graeca. At a later point Cornutus adverts to the well-known passage in Book XV of the Iliad, where Zeus reminds Hera that he had once suspended her from on high by hanging anvils on her feet and by binding her hands with an unbreakable golden chain (δεσμόν

nae Fragmenta Aetatis Caesareae I, Turin 1955, 167 – 209. It has even been claimed (*e. g.* by MARTI in AJPh 66, 1945, 354) that the cognomen Annaeus indicates that Cornutus was a freedman of the Annaei, Lucan's family; but there is insufficient evidence to support such a claim.

[45] Vita Persii: *cognouit* (*scil.* Persius) *per Cornutum etiam Annaeum Lucanum, aeque tum auditorem Cornuti.*

[46] Cornutus is seldom even mentioned by students of Lucan. A dubious exception is L. HERRMANN (Latomus 6, 1947, 93, n. 1), who suggested that Cornutus had 'edited' the remains of the Pharsalia after Lucan's death. Few scholars will wish to take HERRMANN's views on Cornutus' alleged editorial intervention seriously.

[47] For συνέχω, see above n. 20; for διοικέω see SVF II 416 (τὸ διῆκον διὰ πάντων πνεῦμα, ὑφ' οὗ τὰ πάντα συνέχεσθαι καὶ διοικεῖσθαι), 546 (ὑπὸ φύσεως οἱόντ' ἦν συνέχεσθαι καὶ διοικεῖσθαι τὸν κόσμον), and 912 (τὸ φύσει διοικείσθαι τόνδε τὸν κόσμον).

[48] SVF II 1062 (= DGG 465).

[49] SVF II 1076.

... χρύσεον ἄρρηκτον) (I1, XV, 18–20). In interpreting this passage, Cornutus explains the Homeric δεσμός which bound Hera in terms of the Stoic cosmological δεσμός which binds together the elements of the universe[50]; through the operation of these bonds, according to Cornutus, the elements are 'held in tension' (τείνεται c. 17). That Cornutus was thinking here of Chrysippus' cosmic tension or τόνος is evident from later passages in the Theologia Graeca where, describing Heracles, he states that Heracles was conceived as an archer because he penetrates all things (like the Chrysippean πνεῦμα) and so establishes a certain ἔντονος (c. 31)[51]. At all events, if there were no cosmic tension restraining (ἐμποδίζειν)[52] the elements, the universe would either be swamped with floods (ἐξυδατώθη) or consumed with fire (ἐξεπυρώθη c. 17). Later in the treatise Cornutus returns to this traditional Stoic conception of the cosmic conflagration (ἐκπύρωσις) in considering the hearth-goddess Hestia, who is associated with the 'ever-living' (ἀείζωον) fire of the universe, from which all things arise and into which all things are finally resolved: μυθεύεται δὲ πρώτη τε καὶ ἐσχάτη γενέσθαι τῷ εἰς ταύτην ἀναλύεσθαι τὰ ἀπ' αὐτῆς γινόμενα καὶ ἐξ αὐτῆς συνίστασθαι (c. 28). Once again, it would appear that Cornutus has simply taken over this doctrine and terminology from a lost work of Chrysippus, for we have a doxographical report of Chrysippus' teaching on fire preserved by Arius Didymus that bears a striking resemblance to the passage in Cornutus: τὸ δὲ πῦρ καὶ κατ' ἐξοχὴν στοιχεῖον λέγεσθαι διὰ τὸ ἐξ αὐτοῦ πρώτου τὰ λοιπὰ συνίστασθαι κατὰ μεταβολὴν καὶ εἰς αὐτὸ ἔσχατον πάντα χεόμενα διαλύεσθαι[53]. The similarity between these passages strongly suggests that Cornutus was following Chrysippus closely, and that the terms συνίστασθαι and ἀναλύεσθαι/διαλύεσθαι are of Chrysippean origin. For the purposes of the present discussion, it is not worthwhile to trace the sources of Cornutus' doctrine in greater detail, save to mention that the Theologia Graeca is a work which could well be studied with

[50] The identification of the Homeric with the Stoic cosmological δεσμός was widely current in the first century A. D.; cf. the remarks of Philo, De incorr. mundi, c. 24 (= SVF I 106), where the πνευματικὸς τόνος is said to be a δεσμὸς οὐκ ἄρρηκτος, and also Heraclitus the Allegorizer, Quaestiones Homericae, c. 40 (ed. F. BUFFIÈRE Paris, 1962, 49), who explains that the δεσμός is unbreakable ἐπειδήπερ ἡ τῶν ὅλων ἁρμονία δεσμοῖς ἀρραγέσι συνωχύρωται. Both Philo and this Heraclitus were manifestly influenced by Stoicism here and elsewhere.

[51] The first sentence in c. 31 of the Theologia Graeca explains that Heracles is the λόγος in all things through which nature acquires its strength: Ἡρακλῆς δ' ἐστὶν ὁ ἐν τοῖς ὅλοις λόγος, καθ' ὃν ἡ φύσις ἰσχυρὰ καὶ κραταιά ἐστιν. However, since the subsequent discussion emphasizes that this strength in all things comes about through tension (ἐντόνος), VON ARNIM was no doubt correct in thinking that λόγος in the first sentence had arisen through scribal inadvertence, and that τόνος should be read in lieu of λόγος (see VON ARNIM's note to SVF I 514).

[52] It is possible that ἐμποδίζω was a term which had especial significance for the Stoics; *cf.* SVF II 546.

[53] SVF II 413 (= DGG 458).

profit by students both of Stoic cosmology and of Lucan. Enough has been said, I hope, to suggest that the principal theories and vocabulary of Chrysippus' cosmological system could have been familiar to Lucan from the writings of Cornutus his teacher.

This Stoic vocabulary could also have been familiar to Lucan from the writings of Seneca, his uncle. There is no need to demonstrate that Seneca, a Stoic himself, was thoroughly conversant with the writings of his Stoic predecessors; indeed, he gives the fullest account in Latin of Chrysippus' πνεῦμα-theory and the operation of bodily τόνος (which Seneca renders as *intentio spiritus*)[54]. On a number of occasions he refers to the operations of cosmic πνεῦμα in the universe, as for example in the Consolatio ad Helviam, where he speaks of the *divinus spiritus per omnia maxima ac minima aequali intentione diffusus* (8, 3), or in a letter where he tells Lucilius, *prope est a te, tecum est, intus est. ita dico, Lucili: sacer intra nos spiritus sedet* (Ep. 41, 2). But Seneca was equally familiar with the metaphors of Stoic cosmology. At the beginning of the Naturales Quaestiones, he (and Lucilius) set out to see whether all parts of the universe are woven together (*implexa*[55]) in a certain order (1, 1, 4); one of the objects of the treatise will be to lay bare the *nexus* and *contextus* of the universe (2, 1, 7), where these two Latin terms evidently render the Stoic terms δεσμός and συμπλοκή respectively. Metaphors of binding and weaving are employed frequently by Seneca[56]. Of all the Stoic cosmological conceptions, however, the one which most appealed to Seneca was that of the ἐκπύρωσις[57]. Because the notion of ἐκπύρωσις is directly relevant to Lucan, I shall quote one Senecan description of the conflagration at length:

> *omnia ista ingentibus interuallis diducta et in custodiam uniuersi disposita stationes suas deserant; subita confusione rerum sidera sideribus incurrant, et rupta rerum concordia in ruinam diuina labantur, contextusque uelocitatis citatissimae in tot saecula promissas uices in medio itinere destituat, et, quae nunc alternis eunt redeuntque opportunis libramentis mundum ex aequo temperantia, repentino concrementur incendio, et ex tanta uarietate soluantur atque eant in unum omnia; ignis cuncta possideat, quam deinde pigra nox occupet, et profunda uorago tot deos sorbeat* (Ben. 6, 22, 1).

I shall return to Seneca's image of the *profunda uorago* which results after the conflagration; here it is enough to note that Seneca's diction accurately con-

[54] Nat. Quaest. 2, 6, 3 – 6 and 2, 9, 1 – 4.

[55] cf. Ep. 107, 7 – 10.

[56] See, for example, Ep. 24, 26, 71, 12, Cons. ad Marc. 24, 5, and Nat. Quaest. 2, 47, 1.

[57] In addition to the passage mentioned below, there are lengthy treatments of the notion by Seneca at Cons. ad Marc. 26, 5 and Cons. ad Polyb. 1, 2.

veys the metaphors of Stoic cosmology: that the *contextus* (συμπλοκή) of things gives way when all stability has been shattered, whereupon all things 'dissolve' (*soluantur* for ἀναλύεσθαι) into one fiery mass.

Seneca, then, faithfully reproduces the vocabulary of Stoic cosmology. But the Latin author who made the most extensive effort to reproduce this vocabulary was the Stoic poet Manilius, whose Astronomica was published early in the principate of Tiberius. The subject of Manilius' poem is properly astrology, the relationship between human life and astral movement. But if Manilius is to discuss the influence of astral motion on human life, he must have some theoretical basis for doing so; he must demonstrate that the movements of the heavens are not fortuitous. Manilius accordingly proceeds to demonstrate that all parts of the universe are indeed interconnected, and his demonstration amounts to an exposition of traditional Stoic – and preeminently Chrysippean – cosmology[58]:

> *hoc opus inmensi constructum corpore mundi*
> *membraque naturae diuersa condita forma*
> *aeris atque ignis, terrae pelagique iacentis,*
> *uis animae diuina regit, sacroque meatu*
> *conspirat deus et tacita ratione gubernat*
> *mutuaque in cunctas dispensat foedera partes,*
> *altera ut alterius uires faciatque feratque*
> *summaque per uarias maneat cognata figuras.* (1, 247 – 254)

Manilius' *uis animae diuina* is manifestly a periphrastic description of Chrysippus' cosmic πνεῦμα; with a 'sacred movement' this divine spirit or godhead 'breathes through' (*conspiro*, as earlier in Cicero, is a calque on Chrysippus' συμπνέω) the universe. More important, this cosmic πνεῦμα measures out *mutua foedera* by which all parts remain 'cognate' (cf. the Chrysippean term συμφυής). I would suggest that the use of *foedera* here connotes more than simply 'pacts' or 'treaties' (the normal meaning of *foedera*[59]). Whereas

[58] Citations from Manilius are from the edition of A. E. HOUSMAN, 5 vols., Cambridge 1937. It is unfortunate that Housman expended so much energy in deriding and avoiding the views of the scholars whom he called 'Pamposidonisten' (vol. V 114; *cf.* vol. I lxxiii: 'The sacred name of Posidonius, if I remember right, is not once mentioned in my notes'), for it blinded him in general to the manifestly Stoic orientation of the Astronomica. Consequently, on points of cosmology (rather than astronomy), his notes are rarely of any use, and his ignorance of Stoic sources has led later scholarship to underestimate Manilius' debt to Stoicism (the unfortunate tendency is marked, for example, in G. VALLAURI, Gli astronomici di Manilio e le fonti ermetiche, RFIC 82, 1954, 133 – 167).

[59] See TLL, *s.v. foedus* I, A.

for Lucretius[60] and Vergil[61] *foedera* between inanimate objects were equivalent to 'laws', for Manilius the *foedera* imply physical 'bonds' between various parts of the universe, so that the one part will move in accord with the other (*altera ut alterius uires faciatque feratque*). In other words, Manilius appears to be using the Latin term *foedus* to represent the Stoic term δεσμός[62].

An equally detailed exposition of Chrysippean cosmology is found at the beginning of Book II of the Astronomica; there Manilius announces that he will set out on new poetic seas and will sing of topics never before treated in poetry:

> *namque canam tacita naturae mente potentem*
> *infusumque deum caelo terrisque fretoque*
> *ingentem aequali moderantem foedere molem,*
> *totumque alterno consensu uiuere mundum*
> *et rationis agi motu, cum spiritus unus*
> *per cunctas habitet partes atque inriget orbem*
> *omnia peruolitans corpusque animale figuret.* (2, 60 – 66)

Here again the god which is 'infused' (*infusum*) in the four elements is equivalent to the *spiritus unus* (πνεῦμα) which pervades all parts of the universe whereby the universe, assumes the likeness of a living being (ζῷον). This universe lives through its 'mutual sympathy', where *consensus* (as in Cicero) exactly reproduces Chrysippus' term συμπάθεια. As I suggested above, the *aequale foedus* which here controls the mighty cosmic mass, is equivalent to the Stoic δεσμός. That this *foedus* or δεσμός has for Manilius the unmistakeable connotation of binding is clear from a similar passage in Book III where, describing the *concordia* which controls the mutual give-and-take of the elements, he declares the universe to be 'bound up by a reciprocal bond': *alterno religatus foedere mundus* (3, 55)[63].

[60] Lucretius' *foedera naturai* (1, 586, 2, 302, 5, 310, 6, 906 – 907) are apparently equivalent to 'laws' of nature; this synonymity is most clearly expressed at 5, 56 – 58: *quo quaeque creata/foedere sint, in eo quam sit durare necessum/nec ualidas ualeant aeui rescindere leges* . . . In passages such as this, the term *foedus* carries no connotation of 'binding', in spite of K. REICH's attempt (Der historische Ursprung des Naturgesetzbegriffs, in Festschrift Ernst Kapp, Hamburg 1958, 121 – 131) to demonstrate that Lucretius' *foedera* correspond to the Epicurean συγκρίσεις οὐσιώδεις.

[61] *cf.* Georg. 1, 60 – 61 (*continuo has leges aeternaque foedera certis/imposuit natura locis),* where the synonymity between *foedera* and *leges* is explicit.

[62] *cf.* W. JAEGER, Nemesios von Emesa, Berlin 1914, 108. According to JAEGER, Manilius' *mutua foedera* 'sind poetische Ausdruck für den δεσμός'.

[63] There is a striking similarity between this line in Manilius and a line in the Aetna: *et firma aeterno religata est machina uinclo* (230). The Aetna-poet was certainly a Stoic; he was also heavily indebted to Manilius, as has been shown by F. F. LÜHR, Die Kritik des Aetna-Dichters an Manilius, Hermes 99, 1971, 141 – 149.

If the universe were bound together in sympathy such that one part responded to an alternation in another, it would be theoretically justifiable to speak of human response to astral movement. Throughout the Astronomica Manilius is concerned with expounding the structure of the universe in these terms; he was not, as was Seneca, obsessed with the prospect of its destruction. Nevertheless, Manilius was fully aware of Stoic arguments to the effect that a loosening of the cosmic binding would lead to a dissolution of the universe as it now exists. In Book II, for example, after describing the coherent structure of the universe in the passage quoted above (2, 60 – 66), he goes on to state that there could be no coherence and no controlled interchange of elements 'unless the cosmic structure were to consist in an interweaving of cognate parts' – *nisi cognatis membris contexta maneret/machina* (2, 67 – 68) – where, once again, his diction reflects the Chrysippean notions of συμφυΐα and συμπλοκή. He returns to the question of cosmic dissolution later in Book II in order to emphasize the Stoic doctrine that cosmic coherence is dependent upon the binding force (here *uincula*) of πνεῦμα; if this binding force were released, the universe would dissolve:

> *quae nisi perpetuis alterna sorte uolantem*
> *cursibus excipiant nectantque in uincula, bina*
> *per latera atque imum templi summumque cacumen,*
> *dissociata fluat resoluto machina mundo.* (2, 804 – 807)

Manilius never describes the ἐκπύρωσις which would attend such a dissolution (he was concerned with cosmic order, not destruction), but his language here, particularly *resoluo* for ἀναλύω, shows once again that he was consciously reproducing Stoic terminology.

There is therefore no difficulty in assuming that Lucan would have been thoroughly conversant with Stoic vocabulary concerning the binding and dissolution of the universe; he would have known it from any – and probably all – of the sources I have mentioned. Cornutus presumably lectured to Lucan on the Stoic doctrines which were adumbrated in his Theologia Graeca. Many scholars have assumed that the writings of Seneca, in particular the De Beneficiis and the Naturales Quaestiones, were used as source-material by Lucan[64], and there is nothing in the chronology which would make this assumption improbable: Seneca's De Beneficiis was written after 56 and probably before 62, whereas the Naturales Quaestiones were probably composed

[64] H. DIELS, Seneca und Lucan, rptd. in Kleine Schriften zur Geschichte der antiken Philosophie, ed. W. BURKERT, Darmstadt 1969, 379 – 408; C. HOSIUS, Lucanus und Seneca, Jahrbücher für classische Philologie 145, 1892, 337 – 356; see also the remarks of M. P. O. MORFORD, The Poet Lucan, Oxford 1967, 37 – 50.

between 62 and 64 [65]; Lucan's Pharsalia may have been begun as early as 63, and were unfinished at his death in 65[66]. Similarly, it has been demonstrated beyond doubt by SCHWEMMLER that Lucan was familiar with the Astronomica and on many occasions reproduced Manilian diction[67]. Save to emphasize that all these sources could have been utilised by Lucan, we need not worry about defining his particular source for the Stoic vocabulary of cosmic binding and dissolution too narrowly. By the time Lucan was writing, the Stoic cosmological metaphors had passed from the restriced realm of cosmology *per se,* and had become familiar in discussions which ostensibly had little or nothing to do with cosmology. For example, Cicero and Seneca on a number of occasions describe human society in terms that are resonant of the Stoic language of cosmic order. Thus Cicero in the De Finibus alludes to the Stoic notion of binding in describing the way nature operates for the common good of mankind: *sic inter nos natura ad ciuilem communitatem coniuncti et consociati sumus*[68]. Elsewhere for Cicero there is no more certain 'bond' (*uinculum*) of friendship than the *consensus* of wills which holds people together: *neque est ullum amicitiae certius uinculum quam consensus et societas consiliorum et uoluntatum*[69]. The primary meaning of *consensus* here is simply 'agreement', yet the passage has a further dimension whereby friendship becomes a human reflection of the cosmic *consensus*/συμπάθεια which is effected by the *uinculum*/δεσμός of the cosmic πνεῦμα. The parallels between human and cosmic order which are implicit in Cicero's language here are made more explicit by Seneca. At one point in the De Clementia he tells Nero (in effect) that the emperor is the δεσμός and πνεῦμα which holds together the state: *ille est enim uinculum, per quod res publica cohaeret, ille spiritus uitalis, quem haec tot milia trahunt* [1, 4, 1]. Yet if this controlling bond is rejected, the coherence of the state will fly to pieces: *haec unitas et hic maximi imperii contextus in partes multas dissiliet (ibid).* All these words – *uinculum, spiritus uitalis, contextus* – have particular point in the discussion of societal order because they carry connotations of the Stoic conception of cosmic order. This parallelism, whether implicit or explicit, between societal order and cosmic order as reflected in the Stoic vocabulary I have outlined, is cardinal to the understand-

[65] The chronology of Seneca's writings is discussed in an appendix to M. T. GRIFFIN's excellent Seneca: A Philosopher in Politics, Oxford 1976, pp. 394 – 400.

[66] See discussion by AHL, Lucan: An Introduction, 352 – 353.

[67] F. SCHWEMMLER, De Lucano Manilii imitatore, Diss. Leipzig 1916.

[68] De finibus 3, 60. *cf.* 3, 69 and 5, 65 (*in omni autem honesto . . . nihil est tam illustre nec quod latius pateat quam coniunctio inter homines hominum . . .),* as well as Cicero's words in De leg. 1, 16: *quae est coniunctio hominum, quae naturalis societas inter ipsos . . .*

[69] Phill. in M. Ant. 4, 10. *cf.* De fin. 3, 67, where, speaking of the *inter homines iuris uincula,* Cicero adverts to the specific teaching of Chrysippus: *praeclare enim Chrysippus cetera nata esse hominum causa et deorum [scil. dixit].*

ing of Lucan's Pharsalia. I have argued that Lucan must undoubtedly have been familiar with the Stoic vocabulary of cosmic order and dissolution; it remains to investigate the ways in which these metaphors are used in his poetry.

Lucan's Pharsalia[70] is above all an account of the disastrous and nefarious effects of civil war on the stability of the state. Civil war is more nefarious than any other sort of war, since in civil war the opposing armies are members of the one society, bound together by civil ties. But the wars described by Lucan are worse even than normal civil wars, since in this case the opponents are not merely members of the one state, but are related by ties of blood[71]. Cicero had remarked in the De Amicitia that the relationship which exists between parents and children could not be severed, except by the most 'detestable crime' *(dirimi nisi detestabili scelere non potest* (27); for Lucan, too, the civil war between blood-relatives is an unthinkable *scelus,* and such an unthinkable *scelus* could only come about as a result of utter insanity or *furor*. It is the impetus of *furor* which shatters the normal bonds of society, to the point that blood-relatives slay one another and thereby commit the most detestable *scelus* of all. These themes are announced concisely at the very beginning of the Pharsalia:

> *iusque datum sceleri canimus, populumque potentem*
> *in sua uictrici conuersum uiscera dextra*
> *cognatasque acies, et rupto foedere regni*
> *certatum totis concussi uiribus orbis*
> *in commune nefas . . .*
> *quis furor, o ciues . . .?* (1, 2 – 8)

Lucan alludes at once to the universal aspect of the disaster: when the bond of government has been shattered, the entire world is involved in the impact; such is the extent of the *scelus* which destroys opponents who are kindred (*cognatas*). Throughout the poem these themes are viewed from a cosmic (as well as a human) perspective; the destruction of Rome (*urbs*) is tantamount to the destruction of the world (*orbis*). Thus the dissolution of the universe is viewed as parallel to (and, in poetic terms, a result of) the destruction of the state. Lucan is able to keep this parallelism present in the minds of his audience through the use of a vocabulary inherited from Stoic cosmology which,

[70] Citations of Lucan are from the edition of A. E. HOUSMAN, Oxford 1927. I refer to Lucan's poem as the Pharsalia for the sake of convenience, without prejudice to the question of its original title (although I am much persuaded by the arguments of AHL, Lucan: An Introduction, 325 – 332).

[71] On the question of Lucan and civil war see the studies of P. JAL, Bellum civile . . . bellum externum dans la Rome de la fin de la République, LEC 30, 1962, 257 – 267, and also his La guerre civile à Rome, Paris 1963, esp. pp. 35 sqq.

as I have suggested, had both political and cosmological connotations by the first century A.D.

The parallel between the destruction of the state and cosmic dissolution is drawn explicitly by Lucan near the beginning of Book I. After he has announced his topic and has eulogized Nero sufficiently, he is led to expound the cause of so great a war, and to ask what had driven peace from the world. Apparently, he reflects, the 'envious chain of destinies' (*inuida fatorum series*) had ordained that Rome should fall; so too the universe must ultimately dissolve:

> *sic, cum conpage soluta*
> *saecula tot mundi suprema coegerit hora*
> *antiquum repetens iterum chaos, omnia mixtis*
> *⟨uiribus inter se contendent semina mundi⟩*[72],
> *sidera sideribus concurrent, ignea pontum*
> *astra petent, tellus extendere litora nolet*
> *excutietque fretum, fratri contraria Phoebe*
> *ibit et obliquum bigas agitare per orbem*
> *indignata diem poscet sibi, totaque discors*
> *machina diuolsi turbabit foedera mundi.* (1, 72 – 80)

Lucan is here describing the Stoic ἐκπύρωσις[73], and probably has in mind images of the conflagration such as those in the writings of Seneca mentioned earlier. I wish to suggest further that in this passage Lucan has consciously and carefully chosen terminology drawn from and informed by the Stoic cosmological tradition. Consider the *conpages* which dissolves at ἐκπύρωσις. This word originally meant 'putting together' (*con* + *pingo*) and hence 'structure' or 'framework' (of a ship, for example). However, in the first century A.D. the word was used by Stoic poets to denote the structure of the universe: Manilius at one point states that the world is restrained or reinforced by *aetheriis conpagibus* (2, 803). A similar use of the word is found in Seneca's

[72] There is some corruption in the passage, for it would be pointless to say *omnia mixtis sidera sideribus concurrent,* as the transmitted text has it. BENTLEY's solution was to delete these five words, and he is followed in this by HOUSMAN. The more reasonable assumption is that a line has been lost after 74 (rather than that five metrically acceptable words have been interpolated into two adjacent lines). The line which I have printed was conjectured by M. POHLENZ (Causae civilium armorum, rptd. in his Kleine Schriften, ed. H. DÖRRIE. 2 vols., Hildesheim 1965, II 139 – 148, at p. 140, n. 4), on the basis of Seneca's description of the ἐκπύρωσις in the Cons. ad Marc. 26, 6, which Lucan was apparently imitating.

[73] As many commentators have observed; e. g. R. J. GETTY, M. Annaei Lucani de bello civili Liber I Cambridge 1940, 142. J. AYMARD, Quelques séries de comparaisons chez Lucain, Montpellier 1951, 100 remarks that this glimpse of the ἐκπύρωσις is the longest extended simile in the poem.

Hercules Oetaeus where, if the cosmic *conpages* were shattered, either *polus* would collapse[74]. In the Naturales Quaestiones, speaking of the force of *spiritus* (πνεῦμα) within the earth, Seneca states that no *conpages* can restrain its force (6, 18, 3). Only in Stoic writers is the word *conpages* used in cosmological contexts; for them, apparently, the word carried connotations of the pneumatic or aetherial bonds which maintain the structure of the universe. The word presumably carries these connotations for Lucan as well. At all events, the conflagration occurs when the *conpages* has been dissolved (*soluta*). I have suggested earlier that the word *soluo* was used by Roman Stoics to render ἀναλύω, a word employed by Greek Stoics to connote the 'dissolution' of the universe at ἐκπύρωσις. When the framework has been dissolved, there will be nothing to prevent the clash of elements which Lucan describes. For Chrysippus, the binding force of πνεῦμα restrained the elements, and its force was described metaphorically as a δεσμός; for Lucan, as for Manilius before him, the *foedera mundi* correspond to the Stoic δεσμοί[75]. When these *foedera* are broken, the universe dissolves into fire.

Lucan states, however, that the universe will dissolve into *antiquum chaos*, not fire. At first sight it might seem that Lucan has here departed from traditional Stoic terminology. The phrase *antiquum chaos* apparently derives from Ovid – *si freta, si terrae pereunt, si regia caeli/in chaos antiquum confundimur* (Met. 2. 298 – 299) – and there is no reason to assume that Ovid, here or elsewhere, was following Stoic doctrine. Yet the term *chaos* or χάος may well have had associations for a Stoic which, given the paucity of surviving evidence, we can only recover with difficulty. It is reported that Zeno had explained the term πρώτιστα χάος in Hesiod (Theog. 116) as deriving ἀπὸ τοῦ χέεσθαι, 'from its being moist'[76]. Now in Zeno's cosmology the universe arose from two primordial principles, one of which was god (θέος) and was described as fiery (πῦρ τεχνικόν); I have argued elsewhere that Zeno probably conceived the other as being moist (hence his gloss on Hesiod), since it was a widespread notion in ancient biology that generation came about through the interaction of fire and moisture[77]. Furthermore, when the universe dissolved (at ἐκπύρωσις), it must necessarily have dissolved back into these two principles, one fiery, one moist. Only in this way, I would argue, can we under-

[74] HO 1134 – 1136: *nunc, pater, caecum chaos/reddi decebat, hinc et hinc compagibus/ruptis uterque debuit frangi polus.*

[75] PICHON (Les sources de Lucain 169) long ago recognized that Lucan's *foedera mundi* corresponded to a conception 'dont les stoiciens ont si fréquemment parlé', though he never says just what the Stoics did speak of. W. E. HEITLAND, in his introduction to HASKINS' edition of Lucan, London 1887, briefly discusses Lucan's use of the term *foedus* (p. cii).

[76] SVF I 103; *cf.* II 437 and 564.

[77] See my remarks in Phronesis 18, 1973, 259 – 262, as well as the discussion by HAHM, The Origins of Stoic Cosmology, 66 – 71.

stand the testimony of Plutarch concerning Chrysippus' theory of ἐκπύρωσις:

> καὶ μὴν ὅταν ἐκπύρωσις γένηται, διόλου ζῆν καὶ ζῷον εἶναί φησι (scil. Chrysippus) τὸν κόσμον, σβεννύμενον δ' αὖθις καὶ παχυνόμενον, εἰς ὕδωρ καὶ γῆν καὶ τὸ σωματοειδὲς τρέπεσθαι[78].

That is, the cosmic moisture eventually comes to contain and quench (σβεννύμενον) the fire at ἐκπύρωσις so that a subsequent universe can be generated, and I think it is at least conceivable that a Stoic could have described this cosmic moisture as *chaos*. Such at least is how Cornutus understood the term. He states that χάος is either the generative moisture from which the universe derived, or else it is the fire which, when quenched, will in turn regenerate a universe:

> ἔστι δὲ χάος μὲν τὸ πρὸ τῆς διακοσμήσεως γενόμενον ὑγρὸν, ἀπὸ τῆς χύσεως οὕτως ὠνομασμένον, ἢ τὸ πῦρ, ὅ εστιν οἱονεὶ κάος . . . ἦν δέ ποτε, ὦ παῖ, πῦρ τὸ πᾶν καὶ γενήσεται πάλιν ἐν περιόδῳ. σβεσθέντος δὲ εἰς ἀέρα αὐτοῦ μεταβολὴ ἀθρόα γίνεται εἰς ὕδωρ . . . (c. 17)

In other words, χάος for Cornutus could designate the fire into which the universe dissolved at ἐκπύρωσις. It is therefore quite possible that Lucan could have derived this conception of *chaos* from his teacher, even if he were unaware of the Stoic theorizing (and etymologizing) which lay behind it. The meaning of the passage from Book I may therefore be summarized as follows: when the cosmic *foedera* are shattered and the *conpages* is dissolved, the world will seek again the state of fiery *chaos* from which all universes are generated and into which they all ultimately return.

The passage from Book 1, 72 – 80 does not prove that Lucan was conversant with all the intricacies of Stoic cosmological theory; it does show, however, that he was conversant with and stimulated by the vocabulary which the Stoics had employed to illustrate that theory. Lucan clearly employed the Stoic imagery of dissolution because it was germane to a central theme of his poem: that the destruction of the state through civil war is a disaster on a scale commensurable with the dissolution of the universe at ἐκπύρωσις. This (obvious) parallel could easily be evoked by use of diction which had both political and cosmological connotations: as the members of the opposing Roman armies are kindred (*cognatas acies*), so the elements of the stable Stoic universe are cognate (συμφυές); as the shattering of the 'pact of rule' led to destruction of the state (*rupto foedere regni*), so the dissolution of the *foedera*

[78] SVF II 605.

mundi lead to cosmic conflagration and *chaos*. Elsewhere in the Pharsalia, however, Lucan's use of this ultimately Stoic imagery of dissolution is by no means as schematic as these examples might indicate. It is fair to say that Lucan's poetic imagination was obsessed with the image of the dissolution of bonds leading to chaos. This image occurs in an impressive variety of forms throughout the Pharsalia, often at points which may be regarded as crucial to the development of the narrative. Though Lucan's familiarity with Stoic vocabulary gave a cosmic dimension to the image, its recurrence in the poem has little to do with doctrinaire Stoicism. I shall try to suggest something of the range of occurrences of this image of dissolution in the poem.

The early part of Book II is dominated by the macabre recollections of an aged citizen concerning the horrors of the last civil war, that between Marius and Sulla. In this war the onslaught of *furor* needed no stimulus (*trahit ipse furoris/impetus* 2, 109–110); after Marius' first attack, Sulla's vengeance was freed from restraint and let loose:

> *tum data libertas odiis, resolutaque legum*
> *frenis ira ruit. non uni cuncta dabantur*
> *sed fecit sibi quisque nefas.* (2, 145–147)

Once the bonds restraining *ira* were dissolved, it rushed violently into *nefas*. This passage is effectively echoed and capitulated by the atrocious picture of the river of blood with which the citizen ends his recollection. So many corpses were thrown into the river that it flooded its banks:

> *iam sanguinis alti*
> *uis sibi fecit iter campumque effusa per omnem*
> *praecipitique ruens Tiberina in flumina riuo*
> *haerentis adiuuit aquas; nec iam alueus amnem*
> *nec retinent ripae, redditque cadauera campo.* (2, 214–218)

The violence (*uis*) of the river rushes, like *ira* in the preceding quotation, to destruction (*ruit/ruens*); as *ira* could not be restrained by any bonds (*frenis*), neither can the channel and banks restrain (*nec retinent*) the river, and so it bursts its banks and floods all the surrounding plain: *campumque effusa per omnem*. These two images are adumbrations of what I have called the image of dissolution: under the impulse of *furor* or *ira* or *uis* the bonds of restraint (whether *foedera* or *freni* or *ripae*) are broken. The metaphor of the flood images the resulting *chaos* (on the cosmic scale) or *nefas* (on the human scale).

Later in Book II the first confrontation of the civil war occurs. Domitius determines to hold Corfinium against Caesar; he therefore orders his men to destroy a nearby bridge in order to arrest Caesar's advance.

'socii, decurrite' dixit
'fluminis ad ripas undaeque inmergite pontem.
et tu montanis totus nunc fontibus exi
atque omnis trahe, gurges, aquas, ut spumeus alnos
discussa conpage feras . . .' (2, 483 – 487)

This is an interesting command: instead of saying simply 'destroy the bridge', Domitius calls upon the *gurges* to employ all its waters (*omnis aquas*) so that, once the *conpages* of the bridge is shattered, it will be carried off into the *gurges*. While *gurges* could simply mean 'river', it also carries connotations of a 'vast gulf' or 'abyss'. Underlying Domitius' command, then, is the image of the destruction of a *conpages* resulting in a vast abyss. This glimpse of the abyss is an appropriate accompaniment to the war's first encounter.

In Book II Caesar is confronted by Domitius; in Book III the Massilians (who are more Greek than Roman) oppose him. But after three books Pompey's armies have not yet met Caesar's armies; Romans have not yet fought Romans; the *acies* have not yet been *cognatae*. Thus the first truly nefarious battle of the civil war is that of Book IV: the engagement of the Roman armies near Lerida in Spain. Before the engagement can take place, however, there is a mighty flood, temporarily interrupting the war and forming a background against which the first encounter is to be viewed[79]. The armies encamp on either side of the river Sicoris; they decide to dedicate one day of peace to their fatherland and to the 'laws which have been shattered' (*patriaeque et ruptis legibus unum/donauere diem* 4, 27 – 28), and at this very point the flood intervenes. Snows amass in the mountains and are then melted by a spell of torrid heat. The storm which precipitates the flood itself is no normal storm, but one of world-wide dimensions. Winds from the easternmost extremity of the world are driven to the westernmost extremity (i. e. Spain); the accumulation of the weather-systems is described as follows:

hic, ubi iam Zephyri fines, et summus Olympi
cardo tenet Tethyn, uetitae transcurrere densos
inuoluere globos, congestumque aeris atri
uix recipit spatium quod separat aethere terram. (4, 72 – 75)

There is a palpable sense of tension in these lines, of pressure on boundaries whose collapse in imminent: here at the *fines* of the wind, where further passage is forbidden (*uetitae*), the space can 'scarcely contain' (*uix recipit*) the accumulation of black air. Finally, the Pyrenaean snows, which not even the sun

[79] *cf.* the discussion of this flood by H. W. LINN, Studien zur Aemulatio des Lucan, Diss. Hamburg 1971, 15 sqq.

could melt (*soluere*), flow into the river; the river-banks are burst and one huge watery abyss results:

> *iam tumuli collesque latent, iam flumina cuncta*
> *condidit una palus uastaque uoragine mersit,*
> *absorpsit penitus rupes ac tecta ferarum*
> *detulit atque ipsas hausit* ... (4, 98 – 101)

All things are 'absorbed' and 'swallowed up' in this mighty *uorago*. Lucan's language here unmistakeably recalls Seneca's description in the De Beneficiis of the Stoic ἐκπύρωσις and its aftermath[80], where all things are to dissolve into one mass (*ex tanta uarietate soluantur atque eant in unum omnia*) and one vast abyss is to swallow up even the stars themselves: *profunda uorago tot deos sorbeat* (Ben. 6, 22, 1). In Seneca's conflagration, 'dense night' (*pigra nox*) will eventually overcome the fire; so too in Lucan's mighty flood night which obscures the heavens does not experience the sunrise: *nec Phoebum surgere sentit/nox subtexta polo* (4, 103 – 104). Here again, a glimpse of the cataclysm is an appropriate prelude to the war's first civil encounter.

The point is made more explicitly in the events which follow the flood. When the flood subsides, soldiers from the opposing armies recognize each other; the natural propensity to human love overcomes for a brief moment the inclination to horrendous destruction[81]. *Nefas* is laid to one side: *deprensum est ciuile nefas* (4, 172), and love leads the opposing soldiers to embrace one another:

> *mox, ut stimulis maioribus ardens*
> *rupit amor leges, audet transcendere uallum*
> *miles, in amplexus effusas tendere palmas.* (4, 174 – 176)

The paradox is characteristic of Lucan: love here breaks the *leges* of war as a prelude to war breaking the bonds of love. Lucan accordingly addresses a brief prayer to Concordia:

> *nunc ades, aeterno conplectens omnia nexu,*
> *o rerum mixtique salus Concordia mundi*
> *et sacer orbis amor.* (4, 189 – 191)

[80] See MORFORD, The Poet Lucan, 44 – 49.

[81] The political implications of this episode are well discussed by AHL, Lucan: An Introduction 193 – 199. AHL's productive suggestion that the invocation to *sacer orbis amor* 'blots out Caesar's clemency' (p. 194) need not obviate the significance which this episode has within the framework of Lucan's imagery of dissolution.

The metaphors used by Lucan in this passage are familiar from the Stoic cosmological tradition: all things are bound together by an 'eternal bond' (*aeterno nexu* = δεσμῷ), and the resulting harmony is that of the *salus* or stability of a universe constituted of opposing elements (*mixtique ... mundi*). Less familiar, perhaps, is the notion that cosmic love is responsible for this binding or interweaving of all things. Yet this metaphor too appears to derive from Stoic tradition[82]. Discussing Aphrodite, the goddess of love, Cornutus states that she is 'the force which brings together male and female' (ἡ συνάγουσα τὸ ἄρρεν καὶ τὸ θῆλυ δύναμις); she is said to be the most beautiful of goddesses because she provides that 'pleasure in copulation' (τὴν κατὰ συμπλοκὴν[83] ἡδονὴν) which distinguishes man from other animals (c. 24). There is reason to believe that, here as elsewhere, Cornutus was simply following the arguments of earlier Stoics. In a fragment of Philodemus which appears to be a report of Stoic doctrine (possibly Chrysippus'), Aphrodite is described as the force which brings things naturally together: Ἀφροδείτην, δύναμιν οὖσαν συνακτικὴν οἰκείως τῶν μερῶν πρὸς ἄλληλα ... etc.[84]; here again similarity between the passages allows us to surmise that Cornutus and Philodemus were following the same Stoic source. In any case, Aphrodite clearly had for Cornutus a connotation of cosmic binding, for he describes Aphrodite's 'embroidered girdle' (κεστὸς ἱμάς: Il. 14, 214) as follows:

> ὁ δὲ Κεστὸς ἱμὰς ὡς οἷον κεκασμένος ἐστὶν ἢ διακεκεντημένος καὶ ποικίλος, δύναμιν ἔχων τοῦ συνδεῖν καὶ συσφίγγειν. καλεῖται δ'οὐρανία τε καὶ πάνδημος καὶ ποντία διὰ τὸ καὶ ἐν οὐρανῷ καὶ ἐν γῇ καὶ ἐν θαλάττῃ τὴν δύναμιν αὐτῆς θεωρεῖσθαι. (c. 24)

For Cornutus, then, the binding force (δύναμις ... τοῦ συνδεῖν) of cosmic love was seen to operate in heaven, earth and sea. Lucan in all probability derived his identical notion of *sacer orbis amor ... conplectens omnia nexu* from Cornutus his teacher.

Unfortunately, the peaceful concord at Lerida is short-lived. One of Pompey's generals learns of the *foedera pacis* (4, 205), and by means of a long harangue he succeeds in introducing, in place of the *sacer amor,* a 'love of crimes' (*scelerumque reduxit amorem*) in the army; *furor* and *rabies* return

[82] See discussion of the notion of cosmic love in classical and medieval literature by P. DRONKE, L'amor che move il sol e l'altre stelle, Studi medievali, 3rd ser. VI. 1, 1965, 389–422; DRONKE, however, makes no reference to Lucan or to Stoic notions of cosmic love.

[83] It is interesting to note that the verb from which the noun συμπλοκή derives and which describes the binding power of Aphrodite – namely, συμπλέκω – is etymologically identical with *complector,* the verb used by Lucan to describe the effect of cosmic *amor.*

[84] SVF I 168 (= DGG 542).

(4,240), with the result that all things hasten to *nefas*: *itur in omne nefas* (4, 243). Thus the first encounter of the civil war follows the pattern of the flood which preceded it: as in the flood the accumulation of weather-systems overcame the river-banks and resulted in a mighty *uorago*, so in the battle *rabies* and *furor* overcome the *foedera pacis* and lead to utter *nefas*. Both these images are refractions of the one image of cosmic dissolution which so fascinated Lucan's poetic imagination.

In a number of these examples, *furor* has been seen as the force which destroys bonds or laws[85]. On one level of the poem's imagery, Caesar himself is consistently identified as a force of *furor*. From the first moment he is introduced, he is compared by Lucan to Jove's thunderbolt which 'rages in all parts of the sky' (4, 155); at the very first confrontation of the opposing armies he is *Caesar in arma furens* (2, 439). In effect, this *furor* is a superhuman force capable of destroying the *pietas* which naturally keeps together members of the state[86]. That this *furor* also has a cosmic dimension for Lucan is illustrated by the episode in Book V where Caesar sets out with Amyclas to sail across the Adriatic on a primevally stormy night. At the precise moment when Caesar commends himself to Fortuna, the storm breaks. The *turbo rapax* smashes the boat's framework, *sonuit uictis conpagibus alnis* (5, 596), and disaster follows: *inde ruunt toto concita pericula mundo* (5, 597). Clearly the entire universe (*toto . . . mundo*) is to be involved in the ensuing storm. Winds converge from all regions, symbolizing *furor* and *rabies*[87]. With such an onslaught of *furor,* it is easy to anticipate that natural limits will be exceeded and bonds broken. In the event, even the seas relinquish their normal positions, the Mediterranean rushing in to take the place of the Aegean, the Adriatic that of the Ionian sea (5, 613 – 614). Cosmic dissolution is imminent:

> *tum superum conuexa tremunt atque arduus axis*
> *intonuit motaque poli conpage laborant.*
> *extimuit natura chaos; rupisse uidentur*
> *concordes elementa moras rursusque redire*
> *nox manes mixtura deis.* (5, 632 – 636)

[85] It is perhaps worth stressing that the *furor* which in Lucan's poem destroys cosmic and human bonds has no correlate in Stoic cosmological theory concerning the ἐκπύρωσις. What causes the cosmic dissolution is never clearly stated in surviving documents, but there is nothing to suggest that any agent was involved; rather the cause seems to be the periodic need of the universe to be purified (καθαίρεσθαι) and renewed (SVF II 598). In other words, the role assumed by *furor* in the Pharsalia is of Lucan's devising.

[86] *cf.* the excellent discussion by AHL (Lucan: An Introduction 197 – 209) on the superhuman dimension of Caesar and his *furor*.

[87] *e. g.* 5, 599 (*iam te tollente furebat/pontus,* invoking Corus) and 603 (the *rabies Aquilonis*).

Once the cosmic *conpages* is shaken, the elements are no longer bound in place, and they burst forth from their customary locations (*moras*). The entire universe (*natura* in Stoic terminology)[88] fears that *chaos* is at hand, which, as I suggested earlier, connoted for Lucan and Cornutus the cosmic dissolution or ἐκπύρωσις, and which would be followed by primeval night. The *furor* of this cosmic storm, which threatens to destroy the universe, is thus a metaphoric correlative of the *furor* of Caesar, which similarly threatens to destroy the state.

The superhuman and indeed supernatural aspect of this *furor* is revealed again in Book VI, in a curious episode which many critics have dismissed as an example of Lucan's tasteless indulgence in the grotseque[89]: the visit of Sextus Pompey to the witch Erictho. In a striking way the Erictho episode recreates and illustrates what by now emerges as a central theme of the Pharsalia: that *furor* is the force which destroys the natural concord of the state and the stability of the universe, and leads, if unchecked, to *nefas* and *chaos*. In its illustration of this theme, the Erictho episode is structurally central to the poem's meaning. Divination was theoretically acceptable to orthodox Stoicism, since it allegedly involved the ability of a trained vision to see the 'chain of things' (*series rerum* 5, 179), the concatenation of events which was the Stoic εἱμαρμένη, and hence the bearing of various events on human life in the past or future. In Book V there is an example of what to Stoic theorists would have been a theoretically legitimate investigation of the *series rerum* by divination, in the visit of Appius to the Delphic pythoness Phemonae. But Sextus Pompey's visit to the witch Erictho in Book VI is of an entirely different order; what he seeks is not legitimate knowledge (6, 430). The spells of witches are *inpia* (6, 443), their impious power being that they may alter the order of events or the locations of the elements in the universal order; for under witches' spells, *cessauere uices rerum* (6, 461)[90]. Lucan emphasizes this point by giving a catalogue of examples of each of the four elements abandoning its natural location under a witch's spell. First, *aether* (fire) disobeys the cosmic law (6, 462 – 469); next the winds (air) behave in unwonted manner (6, 469 – 472);

[88] For the equivalency of the terms *natura, mundus, deus, fatum*, etc. in Stoic cosmology, see Seneca, Ben. 4, 7, 1 – 2 (= SVF II, 1024).

[89] *E. g.* P. LEJAY, M. Annaei Lucani de bello civili liber primus, Paris 1894, pp. xliii – xlvi.

[90] The notion of the elements abandoning their places was one which may have fascinated Lucan, for he treated it again in his Iliacon:

> *haud aliter raptum transverso limite caeli*
> *flammati Phaetonta poli videre deique,*
> *cum vice mutata totis in montibus ardens*
> *terra dedit caelo lucem naturaque versa ...*
> (ed. W. MOREL, Fragmenta Poetarum Latinorum, Leipzig 1927, 129).

then water in various forms behaves unnaturally (waterfalls hang suspended, etc., 6, 472 – 480); finally, the earth may shatter its normally stable *axes* (6, 481 – 482). In short, on the level of metaphor, the power of witches is identical to that of *furor*: it may drive the elements from their accustomed locations and so threaten *chaos*. Thus it is not coincidental that Erictho's invocations are addressed to the Eumenides (or Furies), to Stygian *Nefas*, and to *Chaos* itself (6, 695 – 696).

The climax of the civil war – the clash of the two Roman armies at Pharsalus – occurs in Book VII. As might be expected, the battle is seen by Lucan as a riot of *scelus, rabies, ira* and *furor,* reaching its most terrible *nefas* at the point where fathers meet sons in the front ranks of each army. The pitch of the battle rises steadily to that point; but the furious pitch is already present in Pompey's camp before the battle. His soldiers are anxious to begin (their anxiety is described as *dira rabies* 7, 51), and Pompey asks what *furor* has possessed them: *quis furor, o caeci, scelerum?* (7, 95)[91]. He thereupon loosens the reins constraining the soldiers' *ira* and *furor: frenosque furentibus ira/laxat* (7, 124 – 125). Attention then turns to Caesar, where in an apostrophe Lucan asks what gods Caesar has invoked in preparation for such *inpia bella*:

> *at tu quos scelerum superos, quas rite uocasti*
> *Eumenidas, Caesar? Stygii quae numina regni*
> *infernumque nefas et mersos nocte furores*
> *inpia tam saeue gesturus bella litasti?* (7, 168 – 171)

This list of underworld deities unmistakeably echoes that invoked by Erictho in Book VI, and suggests once again that Caesar, like Erictho, is a force which can overturn the natural order of things and threaten *chaos*. As the battle is about to begin, a number of portents indicate that cosmic dissolution – the *finis rerum* – is indeed imminent.

> *quis litora ponto*
> *obruta, quis summis cernens in montibus aequor*
> *aetheraque in terras deiecto sole cadentem,*
> *tot rerum finem, timeat sibi?* (7, 134 – 137)

With such a cosmic disaster imminent, the fury of battle is unleashed: *o praeceps rabies* (7, 474). The barbarian troops fight on the wings, but the centre is occupied by the Roman troops of both armies:

> *ille locus fratres habuit, locus ille parentis.*
> *hic furor, hic rabies, hic sunt tua crimina, Caesar.* (7, 550 – 551)

[91] Recalling 1, 8: *quis furor, o ciues* ...

But in the centre of the *rabies* and *furor* where the *nefas* is at its most horrendous pitch, is Caesar himself: *hic Caesar, rabies populis stimulusque furorum* (7, 557). The remainder of the battle is a list of unnatural and unspeakable atrocities. When the battle finally ends, it remains only for Caesar to crown the atrocity with a mighty deed of impiety: he denies burial to the corpses. But, as Lucan points out, after a battle such as this, it matters not whether funeral pyre or putrefaction dissolves the corpses; all things will be dissolved in the cosmic ἐκπύρωσις:

> *hos, Caesar, populos si nunc non usserit ignis,*
> *uret cum terris, uret cum gurgite ponti.*
> *communis mundo superest rogus ossibus astra*
> *mixturus.* (7, 812–815)

And so the battle of Pharsalus ends with an image of cosmic dissolution, an image which has been carefully anticipated in various ways in all the preceding books, and which had been announced already in Book I. It is Lucan's strongest sentiment on the disastrous effect of civil war.

The remainder of the Pharsalia is concerned with the aftermath of the mighty disaster at Pharsalus. After Book VII, where the ultimate destruction of the Roman republic is described, there is no further function for imagery of dissolution, and as far as I am aware, there is no occurrence of the image in the final three books. Lucan henceforth turns his attention to other matters, to the death of Pompey and the ἀγών of Cato. During the first seven books, however, the imagery of dissolution occurs in an amazing variety of forms, and it is not misleading to describe it as central to the meaning of the poem. Its use in the Pharsalia does not demonstrate that Lucan was a doctrinaire Stoic, but it suggests at least that he was the inheritor of a rich tradition of Stoic cosmological vocabulary stretching back to Chrysippus, and that in the application of this Stoic vocabulary, he displayed striking originality.

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