INTRODUCTION

Only one work is known to have been composed by Titus Lucretius Carus\(^1\) (c. 94–55 BC),\(^2\) the six-book poem of Epicurean philosophy, *De rerum natura* (henceforth *DRN*).\(^3\) Almost nothing is known about Lucretius himself; the biased life summary provided by Jerome\(^4\) cannot be used as a reliable source for his biography.\(^5\) The extant state of *DRN* shows clearly that the work

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\(^1\) The praenomen *Titus* is attested in Aulus Gellius and Hrabanus Maurus (see Chapter 1, n. 15) and occurs alongside *Carus* in the subscriptions to each book of O, and Books II and VI (*ari* for *Cari*) of S (= VU).

\(^2\) The dates of Lucretius’ life are extremely difficult to resolve from the few data available (for which see Bailey, vol. 1, 2–4). In a paper (‘On the chronology of Lucretius’ *De rerum natura* and the *Corpus Catullianum*’) presented to the First Century BC Philosophy Seminar at the Faculty of Classics, Cambridge, on 6 March 2007, I offered my own arguments for dating Lucretius’ life from October/December 94 to late September/early October 55 BC. I discovered later that one significant element of my argument, emending Jerome’s figure of Lucretius’ lifespan from forty-four years to thirty-nine (i.e. XXXXIIII > XXXVIIII), had been preceded, in his third attempt at solving the problem, by Giovanni D’Anna (2002). Although the date does not affect the arguments of this book, I shall proceed with the hypothesis that no further alteration was carried out on *DRN* from late 55 BC, and that Lucretius died rather than lost interest in his *gigantisches Lebenswerk*. For further discussion of the dates of Lucretius’ life, although I disagree strongly with his conclusion, see Hutchinson (2001), to which Volk (2010) has responded.

\(^3\) The title of Lucretius’ work is first explicitly attested by Probus (in Keil’s *Grammatici Latini* (hereafter GLK) IV 225, 29), although Vitruvius had already stated (IX, pr. 17, 1) that one could dispute *de rerum natura* with Lucretius; the title of the work also appears in the subscriptions to the individual books in OS. The phrase occurs in Lucr. I.25, and is perhaps alluded to at IV 369 and V 335. *De rerum natura* was a natural title for a work of Lucretius’ genre and can be regarded as a translation of Greek Περὶ φύσεως, the title of Epicurus’ major 77-book opus from which Lucretius fashioned his work (cf. Sedley (1998), esp. 21–2).

\(^4\) Hier. *Chron*. s.a. 94/3 BC (Ol. 171, 3). I follow most scholars in dismissing the two claims of Jerome not supported elsewhere: (i) that (Marcus Tullius) Cicero *emendavit* the poem, probably a mistaken inference by Jerome or his source from the fact that the earliest mention of Lucretius occurs in a letter from Cicero to his brother (*Ad Q. Fr.* II.9, 3); (ii) that through insanity from a love potion Lucretius committed suicide, which probably derives from Lucretius’ failure to condemn suicide at III.79–82 and a confusion with the Lucullus said to have died by a love potion (cf. Plin. *HN* XXV, 3), negative elements a Christian polemicist like Jerome would happily have applied to Lucretius.

\(^5\) The ‘*Vita Borgiana*’ is now widely accepted to be devoid of authority. For a survey of the very slim evidence regarding Lucretius’ life, from which tenuous inferences are drawn, see L. Canfora (1993).
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was intended to cover six books alone. It was almost, but not entirely, completed, as demonstrated by the unfinished state and improbable order of several arguments, which cannot be satisfactorily explained by textual corruption. Given that the poem still required additions, deletions and reordering at the time of Lucretius’ death, it is natural to suppose that, when he died, much of the work existed on papyrus sheets (chartae) rather than in six ‘fair copy’ book rolls. Because of the poem’s incomplete state, editors must acknowledge that the end goal of their textual reconstruction should only be the state of the work as Lucretius left it rather than a fully perfected piece of literature.

The purpose of this book is not to aid the reconstruction of elements of the poem never written by Lucretius, nor indeed to restore the lacunae that have entered the text during its tenuous textual transmission. Rather, it presents a series of studies of the textual fate of Lucretius’ work from his death in 55 BC through to the rediscovery of the work by Poggio in 1417. The investigation will be limited to textual and codicological analysis; the philosophical and poetical influence of Lucretius from the classical period through to the modern age, a field that has been closely studied, will be set aside, except where there is scope for inferring the textual state and availability of DRN in a given time and place. The difficult question of interpolation in the poem is not considered here: I am extremely wary of positing the wide-scale intervention of interpolating hands in the transmission of DRN and, if the text did suffer from the concerted efforts of one or more interpolators, such activity occurred too early in the

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6 Lucretius strongly implied that the sixth book was his last at VI.92–5 and referred to the transmitted Book I as his first at VI.1937; for a thorough treatment of the question, see Eichstädt (LXIV–LXXVII).

7 Most notably the survival of dual passages (e.g. IV.26–44 ~ 45–53) and the unfulfilled claim at V.155 that Lucretius would discuss the nature of the gods largo sermone. This is very much the consensus of editors, with few objectors (most fully, but unconvincingly, van der Valk (1902)). For a more detailed discussion of the question of the work’s incompleteness and the allegation of interpolation, see Butterfield (2013).

8 If so, we must assume that someone close to Lucretius and/or experienced in Latin poetry and/or Epicurean philosophy ordered the disparate elements of the work, commissioned the first copies of the poem and put them into circulation.

9 On this question see, beyond the commentaries, Madvig (1834) 305–22, Raasted (1955) and Owen (1968).
tradition to be elucidated by close analysis of our extant ninth-century witnesses.¹⁰

There exist two pieces of evidence regarding the editing or commenting of Lucretius’ work (in the modern sense of these terms). First, a grammatical tract that survives only in an eighth-century manuscript (the so-called Anecdotum Parisinum), which perhaps ultimately drew upon a lost work of Suetonius, seemingly attributes an edition of DRN, annotated with critical symbols, to M. Valerius Probus (late first century AD).¹¹ Second, Jerome testified that, in the late fourth century, at least one commentary upon the poem was available to him (and this could be linked with Probus’ work).¹² At any rate, the research behind this book finds no evidence connecting the direct transmission of Lucretius with either of these two works, nor do the capitula turn out to be derived from them at all. Although this conclusion is disappointingly negative, it remains the case that, if Probus did indeed ‘edit’ the text of DRN, that recension could nevertheless have influenced a manuscript early in the surviving stream of transmission.

Over the following five chapters I tackle a range of matters relating to the transmission and Überlieferungsgeschichte of DRN. Chapter 1 reconstructs the history of Lucretius’ extant manuscripts and defends a new stemma for the tradition, augmented by the results of Chapter 4. In Chapter 2 I turn to treat Lucretius’ indirect tradition, assessing the textual relationships that exist between the various authors who cite him and the direct transmission of DRN up to the Carolingian period; on the basis of this study, inferences can be drawn about the availability of Lucretius’ poem in Rome and the Empire and the overall value of the indirect tradition for constituting

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¹⁰ For detailed discussion, which built on K. Müller’s edition (1975) in dismissing over three hundred verses from the work as the result of later hands, see Deuffert (1996), the sole serious discussion of the problem since Neumann (1875) and Gneisse (1878). For an account of my own view, that interpolation scarcely affected the transmission of DRN, see Butterfield (2013).


¹² putò quod puér legeris ... commentarios ... aliorum in alios, Plautum uidelicet, Lucretium, Flaccum, Persium atque Lucanum (Contra Rufin. I.16, written c. 401).
its text. The chapter closes with a detailed treatment of the so-called Lucretian ‘fragments’. Chapter 3 treats a body of non-Lucretian material that appears throughout the Lucretian manuscript tradition, namely the capitula, or subject headings, which are transmitted in the body of the poetic text: the evidence will be refined and then mined for evidence about their origin. Chapter 4 analyses the various (over two thousand) corrections and annotations that occur throughout O, on the basis of a full collation and a new assignation of corrections to different hands; the chapter discusses the activity and methodology of (A) Dungal (early saec. IX), (B) a marginal annotator who highlighted incorrect verses with a series of points (saec. IX), (C) O₂ (saec. IX–Xa), (D) O³ (saec. X–X²), and various marks by hands of the fifteenth (F) and eighteenth (?) centuries (E: O⁴) which have wrongly been given textual significance. Finally, Chapter 5 analyses the few ancient annotations present in Q (= Q¹) that offer an insight into a Carolingian reader’s approach to the text. The book closes with a Conclusion that integrates the evidence turned up by the preceding chapters relating to questions about the script of the archetype (Ω) and its predecessors; to close, a few methodological recommendations are given for future editors of DRN.

Throughout this book I refer to bibliographical material in the shorthand form ‘surname (year)’, with pagination if appropriate; these works are gathered in the Bibliography, along with others I have consulted but not cited. For Lucretian editions and commentaries, which are listed at the beginning of the Bibliography, I refer merely to the editor’s surname where the context provides the relevant information for further investigation. For detailed bibliographical information about all Lucretian editions and commentaries cited in this thesis, please consult the marvellous compendium of Gordon (1985).

13 Since this chapter investigates various matters relating to the processes of producing the three ninth-century manuscripts (OQS), I also discuss matters of rubrication and scribal variation in these codices.

14 The very great number of corrections made in Q by the mid-fifteenth-century Italian hand are not treated in this thesis, since their basis is entirely conjectural and bears no relevance to the Lucretian stemma. Similarly, the conjectural emendations that occur sporadically in S (saec. IX/X, XVII/XVIII) are not treated, as the former were made by the scribe himself or a contemporary from the exemplar (ψ) alone, and the occasional modern alterations have no manuscript authority.
There is perhaps no more famous manuscript stemma for the transmission of any ancient text than that of Lucretius’ *DRN*. Although its basic form was presented in Karl Lachmann’s epoch-making edition of 1850, debate has continued into the twenty-first century about a matter as simple as how many branches it should possess. In this opening chapter, I will demonstrate that the most serious problems should be regarded as solved, even if many scholars have failed to apprehend this. I shall begin with a survey of the primary manuscripts, before turning to their stemmatic relationship.

There is no extant direct witness to *DRN* from the first 850 years of its transmission. The surviving manuscripts fall into two categories, those written in the ninth century, and those in the Renaissance, predominantly in the fifteenth century. Before turning to these, we may briefly consider the proposed existence of a third class, namely papyri. Two decades ago, Knut Kleve (1989) claimed to have found traces of *DRN* in papyrus fragments from the Library of Herculaneum dated to the late first century BC and now preserved in the Officina dei Papiri of the Biblioteca Nazionale in Naples (*PHerc*. 1829–31). Alongside these tiny and tentative snippets of Latin from allegedly four books of *DRN* (I, III, IV, V), Kleve published in 2007 his readings from *PHerc*. 395, first unrolled in 1805, arguing that it contained fragments of Book II. In both cases Kleve conceded that elements not preserved in the direct transmission of the poem must exist in

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1 Cf. Reynolds (1983b) 218: ‘The stemma of Lucretius has long been one of the great show-pieces of classical scholarship.’

2 These fragments, though discovered in the late eighteenth century by Sir Humphry Davy (1778–1829), were set aside as unreadable and too fragile for the primitive tools of unrolling available. Images of them can be seen at Kleve (1989) 14–26 and Kleve (2012) 68.

3 Images of these can be seen in Kleve (2007) and Kleve (2012) 60, 75–6.
The extant Lucretian manuscripts these papyri. Although each of his readings presents only a few letters, of which most are uncertain and many differ from any part of Lucretius’ extant text (and other surviving literature), his identification was tacitly accepted by several scholars, most recently Ferguson Smith and Flores. In 2001 Mario Capasso (2003) disputed the identification in the case of PHerc. 1829–31, revealing amidst a detailed rebuttal that these fragments originate from the same source as PHerc. 395. More recently Beate Beer (2009) has succinctly bolstered his arguments, demonstrating that the majority of fragments currently deciphered from PHerc. 395 (whose readings Kleve reported without due accuracy) do not coincide with DRN, the textual discrepancy being far greater than any supposition of corruption would allow.

It may well be that rolls of Lucretius’ DRN did exist in Philodemus’ library at Herculaneum; if so, however, no fragment of that work can yet be shown to have survived the eruption of Mount Vesuvius in AD 79. We can therefore turn to the manuscript witnesses of the ninth century, of which two are complete and one survives in three fragments containing almost half of the poem’s text.

(i) O (Leiden, Universiteitsbibliotheek, Voss. Lat. F. 30)

The oldest and most famous Lucretian manuscript is the Codex Oblongus, which has borne this name and the siglum O regularly since Lachmann. This luxurious production, described as ‘a most

4 Only Suerbaum (1994), refining his earlier contribution (1992), has sought to develop Kleve’s analysis of the text; Nünlist (1997) attempted to improve the rather forced reconstruction of the layout of the original papyrus roll offered by Kleve and Suerbaum.

5 Doubts about the nature of the script, which Kleve has termed ‘Early Roman’, had already been expressed by Radiciotti (2000) 366–8.

6 Obbink (2007, 34 n. 2) recorded his conclusion from autopsy that PHerc. 395 was not Lucretian, a view which my own analysis from available images certainly supports. The evidence of Kleve (2010), drawing upon an Oxford disegno, does not suggest Lucretian authorship (contrary to the author’s tortuous hypotheses of corruption and improbably arranged sovrapposti); Kleve (2009), Kleve (2010) and Kleve (2012), which offer no new evidence or arguments, do nothing to strengthen the case of the Lucretian identification, or his dating of them to the mid first century BC.

7 Munro, Duff and Heinze more methodically termed O ‘A’ and Q ‘B’ but no one else has adopted this alphabetical rebranding.

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The extant Lucretian manuscripts remarkable manuscript' by Ganz (1996, 92),\(^8\) comprises 192 single-columned folios, each averaging twenty verses per page.\(^9\) The manuscript is the product of an early Carolingian scriptorium, bearing the initial signs of that school’s scribal reforms,\(^10\) and has been dated to the early ninth century by the primary twentieth-century expert in this field.\(^11\) Since Chapter 4 will treat various features of O, particularly its correcting hands, I here provide a mere outline of the manuscript’s history. O was probably copied in a monastery closely linked with Charlemagne’s court (then vagrant), either in north-west Germany or north-east France;\(^12\) Bischoff tentatively suggested that the scribe, whose work is also seen in Bern Burgerbibliothek 212 (saec. IX\(^\text{in}.\)),\(^13\) was originally trained at Mainz. There is no good reason to suppose that O ever left northern mainland Europe (excepting the period 1670–90, on which see Appendix V). Since no evidence survives that anyone between the tenth century and 1417 read Lucretius directly, there is little scope for tracing the respective fates of Lucretian manuscripts in these intervening centuries.\(^14\) Nevertheless, Bischoff revealed that O was corrected by the Irishman Dungal (who was based at St Denis by 811 until 825); we should presume, therefore, either that Dungal corrected O somewhere in Charlemagne’s court soon after its creation, or that it was transferred along with its exemplar to St Denis, to both of which manuscripts Dungal had access

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8 He added that ‘it is hard to think of a contemporary non-liturgical volume copied in such large script and with such lavish spacing’ (93).

9 For discussion of O’s rubrication and other scribal matters, see Chapter 3, n. 4.

10 See especially Bischoff in Braunfels (1965) 206 no. 365.


13 See Schaller (1960) for more on this manuscript of Optatianus Porphyrius.

14 See Appendix II, n. 1. Only one correcting hand can be identified in O between the middle of the ninth century and the seventeenth/eighteenth centuries (i.e. O\(^\text{3}\), for whom see Chapter 4 (D)), and it does not help to locate the manuscript (see following note).
The extant Lucretian manuscripts

(see Chapter 4). O at some stage moved to Mainz,15 for in 1479 Macarius von Busek, the Canon and Syndic of St Martin’s, added his uniform ex libris to its first leaf (see Plate I). This note need not signify a new acquisition (contra Leonard–Smith (86)), so O could have resided there for some time.16 Over the next two centuries O was thrust back into the European world: for an account of its circulation until it entered the University of Leiden in 1690, where it has resided ever since, see Appendix V. We may now turn to O’s less august sibling.

(ii) Q (Leiden Universiteitsbibliotheek, Voss. Lat. Q 94)

The Codex Quadratus, typically given this name and the siglum Q since Lachmann (but cf. n. 7 above), is a manuscript of sixty-nine two-columned folios, regularly of twenty-eight verses per column.17 It is dated to the mid ninth century18 and written, like O, in early Carolingian minuscule. Unlike its older relative, however, Q shows very few signs of having been read before the Renaissance: it did not receive contemporary rubrication, and only two readers left very occasional marks on the text;19 in the middle of the fifteenth century,20 by contrast, a north-Italian hand fully annotated the manuscript, not only dividing words and adding

15 As I will argue in Chapter 4, there is no reason to accept the hypothesis of M. Tangl (reported by Diels (XIV)) that O was corrected by Otloh of St Emmeram (c. 1010–c. 1072) in Fulda in the mid eleventh century or Diels’ further contention (XIII) that O was itself written in Fulda. Hrabanus Maurus (c. 780–856), who mentioned Lucretius’ sigmatic ecthlipsis at De laud. S. Crucis prol. (PL CVII 146c = Epp. 2a (MGH EKA V.3, 383,31)), along with the praenomen Titus (attested only in the indirect tradition at Gell. XII.10,8), could have encountered DRN whilst Archbishop of Mainz (847–56; cf. Falk (1867) 5 (555)). Marginal marks that I discuss in Chapter 4 and attribute to a ninth-century hand have also been associated with Mainz (see Chapter 4 (B)). If so, we can place O in Mainz for some 700 years (mid ninth to mid sixteenth centuries: see below). It was supposed by Lindsay and Lehmann (1925, 15) that O itself was produced in Mainz, which cannot be dismissed as impossible; if so, O seemingly never left Germany until the late seventeenth century. No mediaeval catalogue survives for St Martin’s.

16 De Meyier (1973, 67) suggested plausibly that the shelf-mark LV.I is of a fourteenth-/fifteenth-century hand linked with St Martin’s, which gives further support to the notion that Mainz possessed the manuscript throughout the Middle Ages.

17 For a survey of the state of this manuscript, see Chapter 3, n. 9 and Chapter 5.


19 See Chapter 5.

20 For this more precise dating, see the citation of Albinia de la Marc’s opinion by Reeve (1980) 27 n. 3.
The extant Lucretian manuscripts punctuation but inserting his own conjectures. Q was probably produced in north-east France, and Corbie has been suggested as a possible monastery of origin. It may well be that Q was copied in Corbie and transferred to St Bertin at a later date, for a Lucretius is recorded in Corbie in the twelfth century. Alternatively, Q could have been at St Bertin from the ninth century: the unwelcome fact that a Lucretius does not appear in the twelfth-century catalogue of the monastery at St Bertin (see Berthod 1788) can be explained away on the grounds that (i) such catalogues were often incomplete surveys of monastic holdings, (ii) Lucretius’ DRN was not a work that a monastery would necessarily feel comfortable in recording publicly, and (iii) at an early stage (saec. IX?) the author name ‘Lucreti’ was removed from the title on the front leaf of Q (see Plate V). Although no certain evidence survives locating Q between the late ninth and mid sixteenth centuries, a little more is known about its subsequent history before entering Leiden.

The Parisian Latinist Lambinus (Denys Lambin, 1520–72) was able to make use of this manuscript of a collation of Q made by Turnebus (Adrien de Tournebou, 1512–65) for his 1563 Lucretian edition. In fact, Lambinus mistakenly made use of this manuscript in two forms: for an account of the fate of Q from its re-emergence in sixteenth-century Paris through to its entry into the Leiden University Library, along with O, in 1690, see Appendix V.

21 See Chapter 5, n. 3.
23 See Coyecque (1893) no. 285 Titii Lucretii de rerum natura and Manitius (1935, 42); this view was tentatively held by Leonard–Smith (99, 106). Of course, the manuscript attested in Corbie may well not have been Q, as suggested by Brunhölzl (1962, 103), who supposed that the archetype was copied in Corbie, and that this was the manuscript recorded in the twelfth century. It was mistakenly concluded (from a misunderstanding of the Latin of Diels (XV)) by Leonard–Smith (83), who in turn misled Flores (2006a) 131 and A. Brown (2010) 2, that this St Bertin catalogue contained Lucretius anonymously under its doctored title (see following note).
24 It seems that an original title, of the form T. Lucreti Cari De Rerum Natura Liber Primus Incipit, suffered the erasure of Lucreti and the replacement of the title, again in elegant capitals (saec. IX/X), with de phisica rerum origine vel effectu liber primus incipit feliciter. Lucretius’ name was not restored until a later hand (saec. XIII?) made the addition above (see Plate V).
Before outlining the progress made in evaluating OQ in the nineteenth century, we must turn to the third ninth-century manuscript, a codex surviving in three fragments now spread over two locations. The so-called *Schedae Gottorpienses* (whence the siglum G), preserved in Copenhagen, amount to a gathering of eight two-columned folia that typically bear forty-eight verses each; they contain I.1–II.456 but omit I.734–85 and II.253–304 (as well as I.123, 890–1 and 1068–75 with Q). The other two fragments are bound together in a manuscript preserved at Vienna: the *Schedae Vindobonenses priores* (ff. 9–14), typically given the siglum V, contain II.642 to III.621 but omit II.757–806 (with Q); the *Schedae Vindobonenses posteriores* (ff. 15–18), given the siglum U, contain VI.743–1286 (the end of DRN), followed by II.757–805, V.928–79, I.734–85 and II.253–304 after the subscription. The form and manner of presentation differ in a number of respects between these two Viennese fragments but they are very probably parts of the same original codex, a conclusion first reached by Lachmann (who worked only from collations) but supported more recently by two experts. Given the identity of these three fragments, future Lucretian editors ought to use for clarity a single siglum for the manuscript – I suggest S (= *Schedae*) to avoid the misleading collocation ‘OQGVU’, which suggests a greater array of Lucretian evidence than actually

25 The name of these *schedae* (or sometimes *fragmentum*) was acquired because they were owned by the library of Gottorp Castle in Schleswig, which was transferred to the Royal Library in 1735.

26 For more details about the physical layout of these fragments see Chapter 3, n. 11.

27 No facsimile exists for this fragment but high-quality digital images are available through the *Codices Haunienses* project at www.kb.dk/permalink/2006/manus/241/eng/.

28 See further Chapter 3, n. 11.

29 The Viennese leaves were first associated with Q and G by Siebelis (1844) 788–9.

30 Bischoff (1974) 74 n. 30 and Munk Olsen (1985) 87–8. This is much simpler than positing the unification of two separate (and not overlapping) Lucretian manuscripts, both two-columned codices of a very similar age and place of origin, in the same library in Vienna.

31 Accordingly a new siglum should be used for Laur. 35.29, for which Flores used ‘S’, if an editor should wish to cite its readings.