Shakespeare, who had pre-empted many characteristics of old age in his sixth period, portrays senility in extreme terms, seeing it as a circular reversion to childhood: "Last scene of all / That ends this strange eventful history, / Is second childishness, and mere oblivion / Sans teeth, sans eyes, sans taste, sans everything."

It is clear that Prudentius in the praefatio

has carefully organized his biography in accordance with the astrological system of the seven ages. As often in ancient, medieval, and renaissance writings, a knowledge of astrology is essential for a complete understanding of this delightful poem.

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## PLINY HN 2. 199

Non minus mirum ostentum et nostra cognovit aetas anno Neronis principis supremo, sicut in rebus eius exposuimus, pratis oleisque intercedente publica via in contrarias sedes transgressis in agro Marrucino, praediis Vetti Marcelli equitis Romani res Neronis procurantis [Pliny HN 2. 199].<sup>1</sup>

Students of the elder Pliny agree on his reliability as a recorder (as distinct from interpreter) of historical events.2 But the commentator on the above passage, C. H. Herkert, (op. cit., p. 7), doubts whether the strange occurrence can be explained rationally: it may be a figment of Pliny's imagination, the work of a hurricane, or the result of someone's moving the road round the olive grove and pretending that it was the product of divine interference. None of these suggestions is satisfactory, particularly since the passage occurs in a section of Pliny's work that deals with seismic activity (2. 191-206), and, if he is unsure as to exactly how it happened, he implies that an earthquake had something to do with the marvel.<sup>3</sup>

Italy is a seismically active area, and there were several reminders of this in A.D. 68. On

1. H. Rackham (trans.), Pliny: Natural History, I<sup>2</sup> (Cambridge, Mass., 1949): "Our generation also experienced a not less marvellous manifestation in the last year of the Emperor Nero, as we have set forth in our history of his principate: meadows and olive trees with a public road running between them got over to the opposite sides of the road; this took place in the Marrucinian territory, on the lands of Vettius Marcellus, Knight of Rome, Nero's estate-manager." Pliny refers to the marvel again at 17. 245: "super omnia quae umquam audita sunt erit prodigium in nostro aevo Neronis principis ruina factum in agro Marrucino, Vetti Marcelli e primis equestris ordinis oliveto universo viam publicam transgresso arvisque inde a contrario in locum oliveti profectis." The ager Marrucinus is on the Adriatic coast near Teate (now Chieti).

2. Cf. M. A. T. Burns, An Historical Commentary on the Reign of Augustus Based on the Evidence of Pliny the Elder, Naturalis Historia (University of Pennsylvania Diss., 1956); C. H. Herkert, Historical Commentary Drawn from the NatJanuary 1st, Lares at Rome fell to the ground in the midst of preparations for a sacrifice.4 As another omen of Nero's fall, Suetonius and Dio (ibid.) mention the doors of Augustus' mausoleum flying open spontaneously, apparently not on the same day as the above incident.<sup>5</sup> (Dio further reports that the sea retreated a long distance from Egypt and covered a large portion of Lycia. Seismic sea waves, or tsunami, commonly occur with severe earthquakes, whether their epicenter is terrestrial or submarine: the sea retreats in response to an alteration in the contours of the sea bed, and rushes back in a wave many feet high, often covering large areas of land.)6 When Galba entered Rome in the autumn, minor earthquakes were noted (Suet. Gal. 18. 1.) and when he was on the way to the elections that gave him a second consulship,

ural History, of Pliny the Elder for the Years 54-76 A.D. (University of Pennsylvania Diss., 1956); J. E. Rhen, A Historical Commentary on the Reign of Tiberius Based on the Evidence of the Historia Naturalis of Pliny the Elder (University of Pennsylvania Diss., 1967).

- 3. Cf. his observation that maritima maxime quatiuntur (2. 194).
- 4. Suet. Nero 46. 2, Dio 63. 26. 5. Statues collapsing or turning round are often attested in antiquity. Earthquakes or tremors were usually the cause. Statues can fall without people being otherwise aware of the tremors: cf. F. B. Krauss, An Interpretation of the Omens, Portents and Prodigies recorded by Livy, Tacitus and Suetonius (Philadelphia, 1930), pp. 176 ff.
- 5. This type of portent is also mentioned often by ancient authors and is caused by seismic activity.
- 6. Plin. HN 2. 196, 200, 201; Philostr. Vit. Ap. 4. 34; N. H. Beck, Earthquakes (Princeton, 1936), p. 25.

there was another tremor.7 However, the biggest earthquake in Italy this year was felt at Rome on June 9th, the day of Nero's fall. Suetonius relates that, as Nero fled, he was terrified by an earthquake (Nero 48. 2). Dio also refers to this, and emphasizes its intensity and terror: καὶ αὐτοῦ ταῦτα πράσσοντος σεισμός έξαίσιος έγένετο, ὥστε καὶ δόκησιν παρασχείν ὅτι ἥ τε γῆ πᾶσα διαρρήγνυται καὶ αί τῶν πεφονευμένων ὑπ' αὐτοῦ ψυχαὶ πᾶσαι  $\ddot{\alpha}$ μα  $\dot{\epsilon}$ π'  $\alpha \dot{\upsilon}$ τον  $\dot{\alpha}$ ναθορνύουσι. Pliny writes, "amnes retro fluere et nostra vidit aetas Neronis principis supremis, sicut in rebus eius retulimus" (2. 232). An earthquake with an epicenter on or off the coast of Italy could have caused a seismic sea wave so that a wave traveled up the course of rivers like a tidal bore.9 Or the backward flows could have been caused by temporary uplifts in the beds of rivers.10

To return to the phenomenon of the ager Marrucinus, which coincided with the ruina Neronis, there is good reason to believe that a landslip was responsible. The Calabria (i.e., ancient Bruttium) earthquakes of 1783 were very carefully observed. One observer met with a detached piece of the surface of the plain (of many acres in extent) with the large oaks and olive-trees, with lupins or corn under them, growing as well, and in as good order at the bottom of the ravine, as their companions, from whom they were separated, do on their native soil on the plain, at least 500 feet higher and at the distance of about three-quarters of a mile." Whether the

Marrucinian landslip occurred slightly before or at the same time as the shock felt at Rome, it was very probably part of the same seismic movement.

However, the most remarkable feature of Pliny's account is that the meadow and the olive grove changed sides, i.e., the piece of land they were on turned through 180 degrees. But this is explicable. When landslides occur, it is not uncommon for the earth to rotate somewhat on a horizontal axis, i.e., the lower portion of the displaced mass rises relative to the upper portion.<sup>13</sup> Whether the portion of land in this instance went through a full 180degree turn is uncertain, for Pliny may be exaggerating.14 It is possible that the olive grove was on a slope above the road and slid across, leaving the road more or less intact, but this seems a less satisfactory explanation of what Pliny describes, where the emphasis is on the prata or arva changing sides. Lateral faulting, though possible, is even less likely. 15

This note has two purposes: (1) to offer a rational and plausible explanation for the phenomenon referred to by Pliny HN 2. 199; and (2) more tentatively, to suggest that the earthquake which occurred in central Italy in June 68 was fairly severe and caused considerable damage. Although the occurrence and size of landslips depends somewhat on the nature of the soil and the amount of rainfall recently, landslips are a common feature of earthquakes reaching 10 or 11 on the modified Mercalli scale of earthquake intensity. The rivers' backward flow, particularly if it was

- 7. Indicated by the statue of Divus Julius twisting round to the east, Suet. Ves. 5. 7; cf. Tac. Hist. 1. 86. 1; Plut. Otho 4. 4.
- 8. 63. 28. 1: "While he was on his way [sc. to Phaon's villa] a terrible earthquake occurred, so that one might have thought the whole world was bursting asunder and all the spirits of those murdered by him were leaping up to assail him" (trans. E. Cary, LCL [Cambridge, Mass., 1925]).
- 9. The 1755 Lisbon earthquake caused a five-and-a-half-foot head of water to rush upriver at Swansea: C. Davison, *Great Earthquakes* (London, 1936), p. 19.
- 10. Such as occurred during the New Madrid earthquakes of 1811 and 1812. Cf. F. W. Lane, *The Elements Rage* (Plymouth, 1966), p. 174: "Some panic-stricken men, who took to their boat to escape the violence of the quake, found themselves carried up-stream with the speed of a galloping horse."
- 11. W. H. Hobbs, *Earthquakes* (London, 1908), p. 146: "No earthquake, ancient or modern, has been more carefully studied."

- 12. Davison, op. cit., pp. 38-39.
- 13. P. Byerly, Seismology (New York, 1942), p. 65.
- 14. This is not to impugn Pliny's value as a reporter, but nearly all reporting undergoes some degree of exaggeration and simplification, particularly when marvels are involved. Cf. G. W. Allport, *The Psychology of Rumor* (New York, 1947), pp. 54 ff.: J. Prasad, "The Psychology of Rumour: A Study Relating to the Great Indian Earthquake of 1934," *British Journal of Psychology*, XXVI (1935), 1 ff. However, the land must have turned at least 90 degrees and may even have turned more than 180.
- 15. This rarely exceeds 20 feet (Heck, op. cit., p. 14) and would have an effect that can hardly be described in the way that Pliny does in 2. 199 and 17. 245. For a photograph of what the result looks like, cf. Hobbs, op. cit., p. 176.
- 16. This has 12 gradations, from 1 (not felt except by a very few under especially favorable circumstances) to 12 (damage total, waves seen on ground surfaces, objects thrown into the air): cf. Lane, op. cit., Appendix B.

caused by uplifts in the river beds, is a sign of a severe earthquake. Although no damage at Rome is reported (easy to ignore amidst the excitement accompanying Nero's fall), the earthquake was strongly felt there. Rome is about ninety miles from Teate, so the earthquake seems to have affected a fairly wide area.17 Pliny may supply a further indication of widespread damage in 68. Immediately prior to the mention of the Marrucinian landslip, he describes a great earthquake in 91 B.C., near Mutina, when two mountains "inter se concurrerunt crepitu maximo adsultantes recedentesque, inter eos flamma fumoque in caelum exeunte" (2. 199). As a result, "villae omnes elisae, animalia permulta quae intra fuerunt

17. It is true that earthquakes of great intensity can affect minute areas, but it is no less true that their areas of maximum damage can cover tens of thousands of square miles, and the total disturbed area, millions, with tens of thousands of lives lost and thousands of dwellings ruined (depending on density of population). At this point it might be useful to note the features of the violent earthquake which occurred during the battle of Lake Trasimene in 217 B.C. Silius Italicus, 5. 610-26, speaks of cliffs crashing, peaks rocking, the earth rumbling, and great chasms opening. The level of the lake

exanimata sunt." The cataclysm was, therefore, a fitting portent of the Social War, from which, says Pliny, the Italian land suffered more than from the civil wars. But Italy suffered severely in the civil wars following Nero's fall and, by his juxtaposition, Pliny could be tacitly suggesting that the major earthquake of 68 was of sufficient intensity to be a fitting portent of the large-scale suffering and devastation that were to follow. His belief in earthquakes as portents is explicit: "numquam urbs Roma tremuit ut non futuri eventus alicuius id praenuntium esset." 18

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rose, rivers flowed backwards, and sea waves reversed their courses. None of this is unlikely, and Plutarch attests cities overthrown, rivers diverted from their courses, and fragments of cliffs torn away (Fab. 3. 2); cf. Plin. HN 2. 200, Dion. Hal. Ant. Rom. 7. 3. 2-3.

18. That Suetonius and Dio do not mention earthquake damage in Italy in A.D. 68 is not significant. They do not mention the great Campanian earthquake which caused so much damage to Pompeii in A.D. 63 either: cf. Sen. *QNat*. 6. 1. 3, 1. 13, 12, 2, 27. 1, 31. 1.

## ANTHOLOGIA LATINA 666 IN CODICES VAT. LAT. 3325 AND MONACENS. CLM 14613

Item 666 of Alexander Riese's edition of the *Anthologia Latina* is titled "Rescriptum Honorii scholastici contra epistolas Senecae ad Iordanem episcopum." In belabored distichs, Honorius extols Jordanes for a life and for moral principles which offer to him greater and truer examples than those which Seneca in his life and *Epistolae* held out to Lucilius (here called Lucillus).

Riese's text is based on two manuscripts, Valentianus 88, saec. ix (= V) and Parisinus 4860, saec. x (= P). A third copy of the poem, found in Codex Pal. Lat. 920, saec. ix (= Q), mentioned but not investigated by Riese in his Appendix, has recently been examined and reported on by Chauncey E. Finch, who remarks that this manuscript from Lorsch, despite its early ninth century date, "adds

nothing which is not already known from V" and is most likely a gemellus of V.2

A fourth manuscript is listed without comment by Riese in the same note in the Appendix; this is Codex Monacensis [CLM] 14613, saec. xi (here designated as M). The poem is found on fol. 85v-86r of this Munich codex.<sup>3</sup> It is very close to P, not only in its variants but also in the *incipit* and *explicit* of the poem. It does contain a few minor spelling errors of its own: 4 *exhiliens* for *exiliens*; 16 *docmatis* for *dogmatis*; 20 *Lucellum* for *Lucillum*; 26 *precanda* for *precando*.

Apparently Riese was unaware of the existence of still another copy of the poem, found in Codex Vat. Lat. 3325, saec. xi (here designated as L).<sup>4</sup> It occurs in a Carolingian hand on fol. 1v, before the text of Sallust but after two

<sup>1.</sup> A. Riese, Anthologia Latina, Part 1, fasc. 2 (Leipzig, 1906), pp. 137-38.

<sup>2.</sup> Riese, Anthologia, p. 387. Chauncey E. Finch, "Anthologia Latina 666 (Riese) in Codex Pal. Lat. 920," CP, LXV (1970), 46-47.

<sup>3.</sup> A photostat and a microfilm of this manuscript were courteously sent for this study by the Bayrische Staatsbibliothek, Munich.

<sup>4.</sup> The study of Codex Vat. Lat. 3325 is based on a microfilm copy of this manuscript placed at the disposal of the