

poem where the plant imagery mediates a change in the erotic dynamics. The change in symbolism from leaf to thorn reflects a transition from flirtation to consummation.¹³ The plant imagery provides the backdrop for the conventional dance of hunter and prey in which "no" can be converted into "yes" by force. Emending the text to add thorns to the fragile leaves in lines 5–6 would diminish this erotic drama. The suggestion of spring breezes advances the characterization of Chloe and her sexuality as something that evades and teases the poet/lover. The image of the lizard parting the brambles can suggest the lover's success in catching the elusive object of his desire. The brambles here may convey some resistance by Chloe, but it is the silent and ultimately ineffective resistance of grasses trodden by a stalking tiger.

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13. The intensification of the erotic activity also corresponds to the change in season: spring breezes turn into the summer heat that lizards love to bask in; spring to late spring or summer, pursuit to capture. The syntax of the stanza also marks the transition with each *seu* clause describing a different season and a different stage of the romance. On the seasons and the syntax, Renehan, "Shackleton Bailey," pp. 321–23.

SUBSISTENCE ANNUITIES AND PER CAPITA INCOME IN THE EARLY ROMAN EMPIRE

In 1984, the economic historian Raymond Goldsmith estimated the average per capita income of the early Roman Empire at approximately HS 380 per year, plus or minus fifteen percent: thus, a range of about HS 320 to 440.¹ Granted the state of our evidence, Goldsmith's estimate is, of course, necessarily speculative. Nonetheless, in this short article I examine neglected evidence from the Roman jurists that tends to support Goldsmith's estimate.² The evidence is twelve passages, all but one from the Antonine jurist Cervidius Scaevola, describing small subsistence annuities left by testators mainly to their freedmen or foster-children (*alumni*).³

Coinage in the Jurists. In preserved juristic writings that antedate the Justinianic codification, the jurists express monetary values in two main ways: for archaic law

1. R. W. Goldsmith, "An Estimate of the Size and Structure of the National Product of the Early Roman Empire," *Review of Income and Wealth* 30 (1984): 263–88, esp. 273–74; also *Premodern Financial Systems: A Historical Comparative Study* (Cambridge, 1987), pp. 34–59.

2. The data derive from a computer data base of 1,557 monetary values in the Roman jurists, compiled with the aid of my research assistant David Leitao. A computer printout of this data base is available from the author upon request. On money in juristic sources, see K. Hasler, *Studien zu Wesen und Wert des Geldes in der Römischen Kaiserzeit von Augustus bis Severus Alexander* (Bochum, 1980), with further literature; at pp. 1–22, Hasler surveys the classical Roman coinage system.

3. See generally L. Boyer, "La Fonction Sociale des Legs d'après la Jurisprudence Classique," *RHD* 43 (1965): 333–408, at 342–55; and E. Champlin, *Final Judgments: Duty and Emotion in Roman Wills, 200 B.C.–A.D. 250* (Berkeley–Los Angeles–Oxford, 1991), pp. 133–34. On *alumni*, B. Rawson, "Children in the Roman *Familia*," in *The Family in Ancient Rome: New Perspectives*, ed. B. Rawson (Ithaca, 1986), pp. 170–200, at 173–86; H. S. Nielsen, "*Alumnus*: A Term of Relation Denoting Quasi-Adoption," *C&M* 38 (1987): 141–88; many were former slaves. I focus on annuities with a probable yearly value of HS 1,000 or less; for some larger annuities, see note 41. Estimated values are summarized in the Table (p. 230 below). On the legal form of Roman alimentary annuities, P. Voci, *Diritto Ereditario Romano*, vol. 2 (Milan, 1963), pp. 307–10.

(e.g., the Twelve Tables), the bronze *as*;⁴ for contemporary law, the brass sester-tius, usually abbreviated HS. Since the sestertius, as a unit of account, had relatively small worth, jurists normally express the stereotyped values of their hypothetical cases either in thousands of sestertii,⁵ or in (*milia*) *sestertia*, which is the same thing.⁶ Occasionally the monetary marker is dropped altogether, and the value is expressed simply as, e.g., *X milia*.⁷ But in two cases, both involving smallish amounts, Gaius uses silver denarii instead of sestertii.⁸ A denarius was equal to four sestertii. As we shall see below (at note 37), at least the jurists Scaevola and Papinian probably also used gold aurei on occasion; a classical aureus was worth 100 sestertii or 25 denarii.

In editing classical texts, the compilers of Justinian's *Digest* and *Institutes* handle these monetary units differently.⁹ The sestertius had long since ceased to circulate, and the compilers strike all references to it. However, in scores of fragments they leave telltale nominative or accusative neuter plurals indicating that the original unit of coinage was probably thousands of sestertii; and on some occasions they even leave behind *milia* as a still more certain marker.¹⁰ At times the compilers also substitute Byzantine aurei for thousands of sestertii,¹¹ according to a formula of assumed equivalence (one Byzantine aureus equals HS 1,000 of classical currency) that Justinian states explicitly at *Institutes* 3.7.3.¹² In this formula, a Byzantine aureus is notionally tarified at ten times the value of the classical aureus.

As for other coinage units, although the silver coin was long gone, the denarius survived as a unit of account; accordingly, in the *Digest* the compilers often retain references to denarii.¹³ But they may not have done so invariably. In a few passages the lost unit of coinage is referred to with a masculine plural, probably indicating

4. Gai. *Inst.* 2.225, 274; 3.223; 4.14–16, 23.

5. Thousands of sestertii: Gai. *Inst.* 1.33; 3.124; 4.17a–b, 21, 34, 41, 42, 43, 46, 50, 51, 53d, 64, 86, 93, 186; *Coll.* 2.5.5 (Paul), 4.5.1 (Papin.), 14.3.4–5 (Ulpian); Paul *Sent.* 1.6a.2, 3.5.12a, 4.6.2a. *Sestertii nummi*: Gai. *Inst.* 4.93, 95.

6. Gai. *Inst.* 3.102, 113, 161; Paul *Sent.* 5.9.1; [Ulpian?] *Vat. Frag.* 181.

7. Gai. *Inst.* 2.235, 238; 4.53a; Papinian *Vat. Frag.* 114; *Coll.* 1.11.2 (Ulpian); Ulpian *Tit.* 2.4, 24.17.

8. Gai. *Inst.* 3.146 (a gladiator is "leased" for *denarii* XX, but on condition that he be "sold" for *denarii* mille if he is killed or disabled), 147 (a ring sold for *denarios* CC). Inscriptions display the same tendency.

9. No bronze values survive in either work. S. Mrozek, "Zur Geldfrage in den Digesten," *AAntHung* 18 (1970): 353–60, is helpful but weak on legal sources.

10. Of 1489 monetary values in the *Digest*, 523 (or 35 percent) are unambiguously associated with neuter plurals; a further 41 (or 3 percent), with *milia*. An example of the former is Paul (27 *ad Ed.*), D. 11.7.23: "Veluti si in dote centum sint, in hereditate *ducenta*, . . ."; the inheritance is worth HS 200,000, and the dowry, by implication, HS 100,000.

11. This is especially clear in Justinian's *Institutes*, which is often adapted directly from Gaius' *Institutes*. Compare Gai. 2.235, with Just. 2.20.36; Gai. 3.102, with Just. 3.19.5; Gai. 3.113, with Just. 3.20.5; Gai. 3.161, with Just. 3.26.8; Gai. 4.53a and d, with Just. 4.6.33a and d. In each case, aurei are substituted for thousands of sestertii.

12. "... pro mille sestertiis unus aureus computetur. . . ." In, e.g., Paul, D. 24.3.49 pr., the value of a dotal instrument is first stated as *solidorum decem*, then a few lines later the same value is *decem milia*: a good example of compiler carelessness. So also Julian, D. 10.3.25; Scaevola, D. 32.38.6. Aurei mixed with neuter plurals: Marcellus, D. 35.2.52 pr.; Africanus, D. 35.2.88 pr.–1; Ulpian, D. 36.3.1.17, 40.7.3.13; Paul, D. 32.97, 34.3.25. Compare Gai., D. 35.2.73 pr. and 5 (neuter plurals), with Just. *Inst.* 2.22.2–3 (aurei); the Justinianic passage is adapted from Gaius.

13. Scaevola, D. 10.2.39.2, 14.3.20, 20.1.34.1 (Greek), 31.88.10, 32.37.5–6 (both Greek), 33.1.13.1 and 20.1, 33.4.12, 34.3.28 pr. and 2, 34.4.30 pr., 36.2.27.1. Paul, D. 12.6.21, 16.3.26.1 (Greek), 35.1.84, 45.1.126.2. Modestinus, D. 50.12.10 (Greek). Eighteen fragments, of which 13 are from Scaevola; seven involve annuities. On the complex evolution of late Roman and early Byzantine coinage, see M. F. Hendy, *Studies in the Byzantine Monetary Economy, c. 300–1450* (Cambridge, 1985), pp. 448–500.

that the original text had denarii.¹⁴ However, this is not certain, since the original coinage could also have been aurei.

The most troublesome case is *Digest* references to aurei. As would be anticipated, throughout the *Digest* and the *Institutes* the compilers invariably express "legislated values," such as fines and penalties, in aurei; here the Byzantine aureus is clearly meant.¹⁵ By contrast, the classical jurists had always expressed fines, penalties, and other judicial values in sestertii.¹⁶ Therefore, despite Justinian *Institutes* 3.7.3, all "legislated values" in the *Digest* should be treated as Byzantine, although some may be "inspired" by classical values.¹⁷

The appearance of aurei in juristic hypothetical cases is more enigmatic. At times, the original text probably used classical aurei and the *Digest* compilers simply left the text as it was (see note 37); at other times, the compilers substituted aurei for classical thousands of sestertii; and at least once they replaced the original figure with an aureus value of their own devising.¹⁸ These three situations are now hard to distinguish.

Despite the obstacles, it is usually possible to reconstruct the original values in juristic hypotheticals. The values are frequently stereotyped: usually the single digit lying closest to a reasonable market value (*HS milia V, X, L, C*, etc.). Thus, slaves are normally worth *HS milia X*; a farm (*fundus*) is typically *HS milia C*; and so on.¹⁹ The regularity of such patterns helps in interpreting ambiguous cases.

Annuities Expressed in Denarii. Cervidius Scaevola is renowned among Roman jurists for his propensity to quote putative private documents (contracts, wills, and so on) and base legal rulings directly upon them.²⁰ Scaevola's legal practice was empire-wide; many if not most of his "cases" have provincial origin, and the

14. Marcellus, D. 13.5.24. Scaevola, D. 12.6.67 pr., 32.39 pr., 33.1.18.1 and 19 pr., 33.2.32.4, 34.1.18 pr., 40.7.40.2, 44.7.61.1. Paul, D. 16.3.26.2, 17.1.26.8, 46.4.9. Modestinus, D. 22.1.41.2. Thirteen fragments; 89 from Scaevola.

15. There are some twenty-seven instances in the *Digest*; e.g., D. 2.1.7 pr., 2.4.12 and 24–25, 2.6.2. In five cases, the compilers use the synonym *solidi*: D. 9.3.5.6, 11.4.1.2, 21.1.42, 40.4.47 pr., 50.16.192.

16. Gai. *Inst.* 1.33; 3.42, 124, 223; 4.46, 93, 95, 186. *Coll.* 1.11.2, 14.3.4–5 (Ulpian); 2.5.5 (Paul). Paul *Sent.* 1.6a.2, 3.5.12a, 4.6.2a.

17. Cf. O. Lenel, *Palingenesia Iuris Civilis*, vol. 1 (Leipzig, 1889; reprint ed., Graz, 1960), *praefatio*, sec. 11. For example, the penalty for violation of the edict *de in ius vocando* is increased: Gai. *Inst.* 4.46 (*X milia*), against Ulpian, D. 2.4.24 (50 aurei); cf. O. Lenel, *Das Edictum Perpetuum*³ (Leipzig, 1927), p. 69. So also the penalty for moving boundary stones: *Die Schriften der Römischen Feldmesser*, vol. 1, ed. K. K. F. W. Lachmann et al. (Berlin, 1848), p. 264 (*HS 5,000*), against Callistratus, D. 47.21.3 pr. (50 aurei; obviously not classical aurei). It is doubtful that *Digest* sources establishing a fine of *viginti aurei* for slaves who fraudulently obtain liberty show that in classical law slaves "have a value of *HS 2,000* for legal purposes": R. Duncan-Jones, *The Economy of the Roman Empire*² (Cambridge, 1982), p. 348 (who, however, also cites *CIL* 8.23956 of A.D. 186). Likewise, Hermogenianus, D. 48.2.10, states that the poor may be debarred from bringing criminal charges; *paupertas* is then defined as having less than 50 aurei, almost certainly not a Diocletianic value.

18. The clearest example is Just. *Inst.* 3.24.4, adapting Gai. *Inst.* 3.147: in Gaius, the price of a ring is 200 denarii, while in Justinian it is ten aurei. Another example of a monetary value invented by the compilers is Just. *Inst.* 4.6.34, based on Zeno, C. 3.10.1.3 (which lacks the hypothetical case).

19. For slaves, juristic sources preserve eighty-seven values or prices; fifty-eight, or sixty-seven percent, are *HS 10,000* (e.g., Gai. *Inst.* 4.53d). For *fundi*, there are fifty-nine values or prices; twenty-seven, or forty-six percent, are *HS 100,000* (e.g., Gai. *Inst.* 3.161). Compare the values attested from literary and epigraphic sources: Duncan-Jones, *Economy*, pp. 348–50 (slaves), 210–15 (land). The jurists preserve 41 estimates of the value of estates, ranging from *HS 30,000* (*Coll.* 4.5.1, Papinian; Julian, D. 30.80) to *HS 10 million* (Celsus, D. 50.16.88); the typical value is *HS 400,000* (17 cases), a knight's census.

20. On Scaevola, see, e.g., H. F. Jolowicz and B. Nicholas, *Historical Introduction to the Study of Roman Law*³ (Cambridge, 1972), pp. 390–91; A. A. Schiller, *Roman Law: Mechanisms of Development* (The Hague–Paris–New York, 1978), pp. 348–51.

private documents he cites are not infrequently in Greek.²¹ Although Scaevola frequently generalizes these documents through use of juristic "John Doe" lay figures (e.g., Seius, Titia, and Maeuius for Roman citizens; Stichus and Pamphilus for slaves),²² their language often sounds authentic, and the wording may well derive in most instances from actual cases about which he had been consulted.²³ One result is that Scaevola is more prone than any other jurist to give monetary values.²⁴

Scaevola's orientation to "daily life" may explain why he alone, among classical jurists, frequently deals with smaller annuities. A subsistence annuity provides the annuitant with the bare necessities of life: food, clothing, and shelter, what is required for physical survival; it does not underwrite, for instance, an education.²⁵ Such annuities were often nonmonetized; testators simply instructed their heirs to supply maintenance (*alimenta*), at times indicating the extent with words such as "the maintenance I provided in my lifetime."²⁶ But these vague instructions caused inevitable disputes, and some testators converted maintenance into money payments. Our interest is in sources that measure subsistence annuities in money.

Typical of these sources is Scaevola (16 *Digesta*), D. 34.3.28 pr., which evaluates a legacy from a certain Aurelius Symphorus.²⁷ The testator words part of his legacy as follows:

Arellio Latino et Arellio Felici singulis quina, cum quis eorum quattuordecim annorum fuerit: ad quod tempus praestari eis volo singulis alimentorum nomine mensuos denarios senos et vestiarii nomine annuos denarios viginti quinque.

As the surrounding text explains, sometime before his death Symphorus had gone personal surety on behalf of the *tutor* of the brothers Arellii, both minors; because of this suretyship he had been forced to pay out a considerable sum on their behalf.²⁸

21. Provincial origin: e.g., D. 32.35.1 (Cappadocia); 32.41.6 (Gades); 33.1.21.3 (Sebaste probably in Syria); 33.2.34 pr. (Arles); 33.7.27.1 (Africa); 50.7.13 (Nicopolis, probably in Moesia). Surviving fragments of Scaevola have about a dozen Greek documents, chiefly wills but a few commercial instruments.

22. The oddest case is Scaevola, D. 14.3.20, where the bank document that Scaevola quotes uses real names, but the surrounding discussion substitutes lay figures.

23. On juristic hypothetical cases, see B. W. Frier, *Landlords and Tenants in Imperial Rome* (Princeton, 1985): pp. 163–69. A good example of a realistic document is the bank receipt in Scaevola, D. 16.3.28, written in "big business Latin."

24. The data base has 204 monetary values from Scaevola. Excerpts from his work constitute 4.92 percent of the *Digest* (as measured by number of words): if this figure is used as a divisor, the index for the frequency of Scaevola's use of monetary values is 41.5. For the other three most frequently cited jurists, the index is 16.2 for Papinian, 8.3 for Ulpian, and 16.7 for Paul. For all other jurists, the index is 18.8. Scaevola gives monetary values more than twice as frequently as any other jurist except Julian and his student Africanus. Word count for the jurists: T. Honoré and J. Menner, *Concordance to the Digest Jurists* (Oxford, 1980), introduction to microforms.

25. Javolenus (2 *ex Cass.*), D. 34.1.6, whom I paraphrase; cf. Paul/Neratius, D. 34.1.23. Sources on subsistence annuities are closely related to those on the familial duty of maintenance (established by imperial constitutions from Antoninus Pius onward); see esp. Ulpian/Modestinus, D. 25.3.5–6. Compare also the alimentary foundations supporting children: Duncan-Jones, *Economy*, pp. 288–319, 333–42, 382–83, with further literature.

26. Roman law on the subject probably developed around legacies that granted *alimenta* without specifying their monetary value; e.g., Valens, D. 34.1.22 pr.; Ulpian, D. 34.1.14.2–3. Many of the texts in D. 34.1 (*de Alimentis vel Cibiariis Legatis*) interpret nonmonetized annuities.

27. Scaevola apparently interprets this legacy as a trust (*fideicommissum*): D. Johnston, *The Roman Law of Trusts* (Oxford, 1988), p. 261, n. 19. Aurelius Symphorus and the brothers Arellii are evidently real persons, though not otherwise attested.

28. On *fideiussio* for a *tutor*, see esp. Papinian, D. 46.6.12; the *tutor* had presumably not exercised due care for the boys' property. Later in his will Symphorus indicates that he had been forced to administer the

But Symphorus evidently retained a sense of responsibility for the Arellii. In his will, he leaves them a legacy of “five each” (*quina*; probably HS 5,000) payable when they reach age fourteen and their majority, plus a small annuity until that age. The annuity is divided into two parts: monthly payments to each of six denarii for maintenance (*alimentorum nomine*), plus a yearly payment of twenty-five denarii for clothing (*vestiarii nomine*). Expressed in sestertii, this annuity has a yearly value of $(6 \times 4 \times 12)$ plus (25×4) , or HS 388. This is clearly a subsistence annuity; the brothers, it may be presumed, were close to destitute.

Symphorus’ annuity is typical of Roman subsistence annuities in its division between *alimenta* (or *cibaria*) paid monthly, and a *vestiarium* with a fixed annual payment that could presumably be drawn upon as needed at any time during the year.²⁹ The annuity is also typical both in its value, and in expressing that value with denarii.³⁰ Scaevola provides the following additional examples:

Scaevola (20 *Digesta*), D. 34.4.30 pr. In a codicil to her will, a testatrix leaves to Sempronia her foster daughter (*alumna*) monthly payments of five denarii, plus an apparently annual payment of 125 denarii for clothing (*vestiarii nomine*). The total yearly value of the annuity is HS 740.³¹

Scaevola (3 *Responsa*), D. 36.2.27.1. To his manumitted slaves, a testator leaves monthly *cibaria* of ten denarii. The total yearly value of the annuity is HS 480. The text does not indicate that this amount was supplemented by an annual payment.

Scaevola (1 *Responsa*), D. 10.2.39.2. A testator orders that his fifteen-year-old slave be manumitted on reaching age thirty, and also that he receive ten denarii for food (*cibarium nomine*), plus twenty-five denarii for clothing (*vestiarii nomine*). As Mommsen recognized in editing this text,³² the first payment was doubtless monthly, the second annual. On this assumption, the yearly value of the annuity is HS 580.

tutela himself. The surrounding text has often been regarded as corrupt; it can apparently be brought to order by reading below: “an <ab> herede [filiorum] eius, pro quo fideiusserat.”

29. Terminology for annuities is not wholly consistent; e.g., Scaevola, D. 34.1.18 pr., refers to the same payment as both *alimenta* and *cibaria*. As the Table (p. 230 below) shows, six subsistence annuities have both monthly and yearly payments; five, only yearly payments; and two, only monthly payments. *Cibaria* tends to be used for monthly payments, and *vestiaria* for yearly payments, especially when both are paid; but *alimenta* may substitute for *cibaria*, and is also used for the annuity as a whole. Notwithstanding Ulpian, D. 34.1.21 (which is ambiguous), monthly payments were presumably intended to meet regular and predictable expenses, especially food but perhaps also housing; except for Papinian, D. 33.1.10 pr. (discussed below), monetized subsistence annuities do not explicitly provide separately for housing, though some freedmen may have lived with their patrons (see n. 39). I assumed the annuitant usually took the cash and spent it as he or she wished; at least, our sources do not indicate otherwise. On the value of *vestiaria*, see n. 31.

30. Denarii were presumably appropriate because the values involved were usually small. In addition to the passages discussed below, see also the larger annuities in Scaevola, D. 33.1.20.1; Paul, D. 35.1.84.

31. Sempronia may be a real name. The clothing allowance is high in relation to the monthly allowance; perhaps the figure should be 25, in which case the annuity’s yearly value is HS 340. The only epigraphic source I know for the yearly value of *vestiaria* is *CIL* 13.5708 (l.16–17), from Upper Germany: 20 denarii, or HS 80; the *CIL* has 30 denarii, but see J. J. Hatt, *La Tombe Gallo-Romaine* (Paris, 1951), pp. 65–84, for a better transcription. Literary sources from Rome set the price of new pair of good shoes at HS 9–12 (Sen. *Ben.* 7.21.2), of a scarlet robe at less than HS 3 (Mart. 2.43.8), and of a shoddy toga at more than HS 12 (Mart. 9.100.6, but cf. also 4.26.4).

32. See his note in the *editio maior*, comparing Scaevola, D. 34.1.18 pr. Elsewhere, the annuity would have been expressed as a single amount. On the legal problem in the text, see M. G. Zoz, “Sulla Capacità a Ricevere Fedecommissi Alimentari,” *SDHI* 40 (1974): 303–28.

Scaevola (4 *Responsa*), D. 33.1.13.1. The testator institutes his wife as his heir, and orders her to pay each of his freedmen *annuos denarios duodecim* for maintenance (*alimentorum nomine*) so long as they remain with her. This amount is very small; its yearly value is only HS 48, so little that the freedmen would require other income to survive. Scaevola indeed implies that the annuity is well below normal when discussing whether the freedmen are still entitled to receive it if the wife insists on taking protracted trips.³³

Annuities Probably in Denarii. Scaevola (20 *Digesta*), D. 34.1.18 pr. To the slaves manumitted in his will, a testator left *menstruos decem* for their maintenance (*alimentorum nomine*). If the masculine accusative plural reflects denomination in denarii, the yearly value of this annuity is HS 480, which accords well with the figures discussed above. However, the testator later added to his will a codicil in which all his freedmen (including those manumitted before his death) are to receive *menstruos septem et annuos vestiarii nomine denos*. Still on the assumption that denarii are involved, the yearly value of this annuity is HS 376. Scaevola rules that since the testator had evidently altered his original intention, the second annuity supersedes the first; the slaves manumitted in his will cannot collect both annuities. Presumably Scaevola bears in mind the usual subsistence purposes of such annuities.

Scaevola (3 *Responsa*), D. 34.1.20.2. Titia leaves the usufruct of a farm to Maeuius, and charges him to pay from it *annuos centenos nummos* to Pamphila and Stichus, obviously freed slaves, for the remainder of their lives. Assuming that the annuity here is expressed in denarii, its yearly value is HS 400. This is somewhat more likely than that the annuity is expressed in sestertii, resulting in a yearly value of only HS 100, well below subsistence. Probably the compilers replaced *denarios* with *nummos*.³⁴

Scaevola (14 *Digesta*), D. 33.1.18.1. To Stichus his foster son (*alumnus*), obviously a former slave, the testator leaves a flat sum of 100, plus an annuity of *menstruos decem et annuos centum*. If, as is likely, this annuity is expressed in denarii, its yearly value is HS 880.³⁵

Annuities Probably in Sestertii. Scaevola (18 *Digesta*), D. 34.1.16.2. To his freedwoman Basilice,³⁶ a testator leaves a capital of ten payable when she reaches age twenty-five; until then, she is to be maintained (*aleretur*) from five percent interest on the capital. There is no value marker, but the legacy is presumably HS 10,000; the annuity's yearly value is therefore HS 500. The testator also wishes Basilice to live with two cofreedmen; this may provide her separately with housing, but it is unclear it would be rent-free. In any case, Scaevola holds that she cannot receive the *cibaria et vestiaria et habitationem* left elsewhere in the will to the testator's freed persons generally, since her *alimenta* were provided for specifically. Again, Scaevola keeps in mind the subsistence purpose of these annuities.

33. "Respondit <scil. Scaevola> et hoc ex longinquis brevibusque excursionibus et modo legati aestimandum esse." The requirement that the freedmen remain with her may indicate that the testator also provided them a dwelling, which would increase the value somewhat; compare, e.g., Scaevola, D. 34.1.18.1, 5.

34. Similar problems arise also with the *principium* and sec. 3 of this text; see below.

35. Presumably the flat sum (which lacks a value marker) should stand in intelligible relation to the annuity. If both the flat sum and the annuity are in aurei or denarii, the annuity is twelve times larger than the flat sum. Likelier is that the flat sum is in thousands of sestertii (yielding annual interest of at least HS 4,000), and the annuity is in denarii; the annuity is a fallback if Stichus squanders his capital.

36. Apparently a real name.

Annuities Expressed in Aurei. Complicating the picture are three *Digest* fragments (two from Scaevola, one from the early Severan jurist Papinian) in which apparently small annuities are expressed in aurei; it is unclear whether the aureus is the classical coin (worth HS 100) or a Byzantine intrusion into the original text. Further, it is next to certain that at least Scaevola and Papinian occasionally expressed monetary values in aurei.³⁷

Scaevola (3 *Responsa*), D. 34.1.20.3. A testatrix institutes her son as heir, manumits her slave Pamphilus, and orders her son to pay Pamphilus *quinos aureos* for food (*cibarium nomine*), plus *in singulos annos quinquagenos* for clothing (*vestiarii nomine*). The first figure is doubtless a monthly payment. If both figures are in fact classical aurei, then the yearly value of the annuity is HS 11,000, which is very high though not impossible (see note 41). More probably, the original text had *denarios*, in which case the yearly value is HS 440, a figure much more in accord with typical annuities to freedmen.

A similar problem arises in the *principium* of this text. A testator manumits Stichus the grandson of his nurse, and orders payment to him of *decem aureos annuos*. Ten classical aurei amount to HS 1,000, which is possible.³⁸ But if the original text had *denarios*, the yearly value is only HS 40. As we have seen, such a small annuity is not impossible; but it is perhaps likelier that Scaevola used classical aurei in this text. It should be noted that Scaevola goes on to interpret this legacy as a true annuity, rather than as subsistence.

Another possible subsistence annuity using classical *aurei* is Papinian (8 *Responsa*), D. 33.1.10 pr. To his faithful friend and business agent Seius, the testator bequeathes *annuos senos aureos* plus his use of his current dwelling, provided that he helps the affairs of the testator's three children. If classical aurei are meant, the yearly value is HS 600 plus the worth of the dwelling. Since Seius is a friend rather than a freedman, the amount seems small; but that very fact may lend poignancy to the legal problem, which is whether the annuity should be prorated downward if two of the testator's children have predeceased him.³⁹ Papinian holds that it should be.

Subsistence Annuities. Because of their hypothetical and stylized character, the numerous monetary values in Roman legal sources necessarily have limited utility for establishing price structures; most social historians largely ignore them, and rightly so.⁴⁰ However, the jurists occasionally provide helpful information that is otherwise unavailable. Despite the appearance of typical "John Doe" names, Scaevola's subsistence annuities do not have a stereotyped form or value, suggesting that his examples derive from real life; and his use of *denarii* or *aurei* reinforces this impression.

Not all annuities to freedmen and other former dependents were as small as those described above.⁴¹ Since larger annuities were more likely subjects of

37. In *Digest* fragments of Scaevola, 20.3 percent of monetary values are in aurei (41 of 202); for Papinian, 23.9 percent (22 of 92). By contrast, for Ulpian the figure is 6.7 percent (23 of 343); for Paul, 7.5 percent (20 of 266); for all other jurists, 10.1 percent (59 of 584). The odds are better than a trillion to one that this distribution is not fortuitous (chi-square test).

38. See note 41; Julian, D. 36.2.11, describes what is probably an annual payment of HS 1,000 (the text has *mille aurei*). By another clause, Stichus is also legated his *contubernalis* and their children; this favors the higher amount, since Stichus would also have to support his family.

39. Further, grants of *habitatio* to freed slaves are common; e.g., Scaevola, D. 32.41.1, 33.2.34; Modestinus, D. 33.2.33.2. Seius, who may be a freedman, is doubtless virtually destitute.

40. E.g., Duncan-Jones, *Economy*; W. Scheidel, "Geldbeträge in der Römischen Literatur I. (14–235 n.Chr.). Ein Vorbericht," supplied to me by the author. Too optimistic is Mrozek, "Geldfrage."

41. E.g., Scaevola, D. 33.1.19 pr. (to two freedmen, *alimenta of annuos sescentos* for life; probably *denarii* = HS 2,400); D. 33.1.21.1 (to a freedwoman, *annua dena*; probably HS 10,000); D. 34.1.15 pr.

litigation, it is unsurprising they are attested in the jurists.⁴² But smaller annuities could also precipitate legal controversy. Although what an individual annuitant received was doubtless small in most cases, its continuance was of literally vital importance to the recipient; and for heirs compelled to pay annuities, the capital commitment could mount rapidly in the case of large-scale manumissions. The will of Pliny the Younger, for example, sets aside the princely sum of HS 1,866,666 for the maintenance of one hundred freedmen. If this amount were fully invested at a conservative annual interest rate of four percent, each annuitant would receive HS 747 per year; if at five percent, still only HS 933 per year.⁴³ Each HS 500 annuity thus implied a capitalization of HS 10,000 to 12,500. No wonder that testators were sparing in their manumissions.⁴⁴

From the recipient's perspective, how realistic are the annuity values in juristic sources? Despite some inevitable difficulties in interpreting these sources,⁴⁵ the likeliest yearly value of most subsistence annuities (nine of thirteen) clusters from HS 376 to 600 (see the Table, p. 230), somewhat above the range that Goldsmith projected for the per capita income of the early Roman Empire. By contrast, the yearly value of annuities in Italian alimentary programs ranges from HS 120 to 240.⁴⁶ Since the alimentary programs benefitted children, while subsistence annuities chiefly benefitted adults, it is predictable that their values will fall on either side of average per capita income. In short, the juristic values for subsistence annuities seem quite realistic.

It is fascinating to watch Roman testators as they cope with harsh economic reality: a grant of liberty, though timely and welcome in itself, could spell privation if not accompanied by the pittance of a small annuity. The bonds of dependency were that difficult to sever. Some testators were more liberal than average, others more niggardly. But the social norm was evidently to furnish former dependents with a decent moiety, enough for escape from abject poverty, but not so much that beneficiaries were tempted to aspire above their station.⁴⁷

(to an infant *alumnus*, *alimenta* of five percent interest on *quadringenta* until he reaches age fifteen; probably HS 20,000); D. 34.5.29 (to a freedman and freedwoman, a legacy of *decem plus alimenta of decem*; no value marker, but probably HS 10,000). Papinian, D. 34.1.9.1 (to a freedman, *annuos viginti aureos* as *vestiaria*, plus monthly *cibaria*; probably classical aurei, = HS 2,000 +). Paul, D. 35.1.84 (to freedmen remaining with son, *alimenta of menstros denarios centenos* plus unspecified *vestiaria*; = HS 4,800 +, but perhaps to be divided). Annuities to family members can be much larger than these; *contra* R. Duncan-Jones, *Structure and Scale in the Roman Economy* (Cambridge, 1990), pp. 100–101, annuitants were often not of servile origin.

42. See Frier, *Landlords and Tenants*, pp. 48–55; the monetary values in the *Digest* tend to support this observation.

43. *CIL* 5.5262, = *ILS* 2927, cf. *AE* (1947): 65. See Duncan-Jones, *Economy*, pp. 29–30. Provision for annuities also in the will of “Dasumius”: *CIL* 6.10229 (line 62), no value preserved; and cf. *AE* (1946): 210 (line 12).

44. Champlin, *Final Judgments*, pp. 136–42. Many legal sources show testators' concern about the capitalization of annuities.

45. The major difficulty is that nothing can be said about whether specific subsistence annuitants in the juristic sources lived in cities or the countryside, although this would make a large difference for their cost of living.

46. Duncan-Jones, *Economy*, pp. 29–30, 208 (seven figures in two inscriptions from Veleia and Tarracina, both early second century A.D.). In any case, such annuities may not have paid for all expenses of raising children.

47. Champlin, *Final Judgments*, pp. 131–42. However, these annuities were administered *extra ordinem* by the Consuls in a manner as favorable as possible to the recipients: Voci, *Diritto*, p. 310.

APPENDIX

TABLE: SUBSISTENCE ANNUITIES IN JURISTIC SOURCES

		Amount Payable		Estimated Value	Recipient
		Monthly	Yearly		
I. Subsistence annuities:					
1. Scaev. D. 33.1.13.1. . . .			Den 12 (A)	HS 48	freedmen
2. Scaev. D. 34.1.18 pr.	MP 7 (C?)		MP 10 (V)	HS 376	freedmen
3. Scaev. D. 34.3.28 pr.	Den 6 (A)		Den 25 (V)	HS 388	two minors
4. Scaev. D. 34.1.20.2. . . .			<i>nummi</i> 100	HS 400	two freedmen
5. Scaev. D. 34.1.20.3. . . .	Aur 5 (C)		Aur 50 (V)	HS 440 (?)	freedman
6. Scaev. D. 34.1.18 pr.	MP 10 (A,C)			HS 480	freedmen
7. Scaev. D. 36.2.27.1. . . .	Den 10 (C)			HS 480	freedmen
8. Scaev. D. 34.1.16.2. . . .			HS 500 (A)	HS 500	freedwoman
9. Scaev. D. 10.2.39.2. . . .	Den 10 (C)		Den 25 (V)	HS 580	freedman
10. Papin. D. 33.1.10 pr.			Aur 6	HS 600 (?)	friend (fd.?)
11. Scaev. D. 34.4.30 pr.	Den 5		Den 125 (V)	HS 740 (340?)	<i>alumna</i>
12. Scaev. D. 33.1.18.1. . . .	MP 10		MP 100	HS 880	<i>alumnus</i> (fd.)
13. Scaev. D. 34.1.20 pr.			Aur 10	HS 1,000 (?)	freedman
II. Some larger annuities (from note 41):					
1. Papin. D. 34.1.9.1. . . .	unc. (C)		Aur 20 (V)	HS 2,000 +	freedman
2. Scaev. D. 33.1.19 pr.			MP 600 (A)	HS 2,400	two freedmen
3. Paul D. 35.1.84. . . .	Den 100 (A)		unc. (V)	HS 4,800 + (?)	freedmen
4. Scaev. D. 33.1.21.1. . . .			NP 10	HS 10,000	freedwoman
5. Scaev. D. 34.5.29. . . .			10 (A)	HS 10,000	freed couple
6. Scaev. D. 34.1.15 pr.			NP 20 (A)	HS 20,000	<i>alumnus</i>

NOTE.—Sources are ordered by ascending estimated annual value of the annuity. Coinage values are Aur(ei), Den(arii), or HS (sestertii); MP indicates a masculine plural value marker in the original text, NP indicates a neuter plural. When the source clearly names annuities, A are *alimenta*, C are *cibaria*, and V are *vestiaria*.

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THE THERMOPYLAE GARRISON OF *VITA CLAUDII* 16

This note concerns a passage from the *Historia Augusta* that purports to be a mid-third-century letter between emperor and provincial official.¹ The specifics of the letter, while perhaps individually plausible, collectively are not, and

1. Whenever dealing with the *Historia Augusta* one's position must be declared: 1) its composition can be provisionally assigned a *terminus post quem* of 393/94 with a *terminus ante quem* of 402, see T. Honoré, "Scriptor *Historiae Augustae*," *JRS* 77 (1987): 156–57, nn. 9–12; 2) it is the product of one author and not six, so H. Dessau, "Über die Zeit und Persönlichkeit der *Scriptores Historiae Augustae*," *Hermes* 24 (1889): 337; and, 3) "Trebellius Pollio," author of the *Vita Claudii* and fictional literary persona behind whom the sole author "*Scriptor*" hides, supposedly enjoyed his *floruit* while Flavius Constantius Chlorus was Caesar (1 March 293 to 1 May 305), *Vit. Cl.* 1.1, 3.1, 10.7, so T. D. Barnes, *The Sources of the "Historia Augusta"*, Collection Latomus 155 (Bruxelles, 1978), p. 14. Honoré, "Scriptor," p. 172, n. 274,