

Nero's 'Architects', Severus and Celer, and Residence Patterns in Rome*

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1. Two companions found in a neglected piece of evidence

Nero's famous Golden House was planned by two *magistri et machinatores* called Severus and Celer (Tac. *Ann.* 15.42).¹ The imperial palace they designed continues to arouse interest, but they themselves have received little attention. This is undoubtedly due to the fact that, except for Tacitus' brief mention, scholars previously had no other information on the two 'architects and engineers', as modern translations conventionally render their profession.² There is however a hitherto neglected source that provides some new information, while at the same time raising some new questions. This source is a stamp on a lead pipe (*fistula*) from Rome which Heinrich Dressel read thus (see *CIL XV* 7393):

ANTONIAE I[.]VI C[...]*ET DVVM*
[...]*LIIORVM SEVERI ET CELERIS IIIII*

* My sincere thanks to Dr. Giorgio Filippi of the Vatican Museum for generous assistance in connection with my work on the lead pipe stamps in the museum; this study is part of that larger project. I am much indebted to Dr. Mikael Lindström, my old friend and onetime fellow student in the Department of Mathematics of Åbo Akademi, for his expertise. The paper also benefitted from the comments of the two anonymous referees of *SCI*. Finally, I am grateful to Fred Unwalla for improving my English. All remaining errors are my own. Research on this paper was facilitated by a Standard Research Grant from the Social Sciences and Humanities Research Council of Canada, which is most gratefully acknowledged.

¹ The OCT text of Tac. *Ann.* 15.42 reads: *Ceterum Nero usus est patriae ruinis extruxitque domum in qua haud proinde gemmae et aurum miraculo essent, solita pridem et luxu vulgata, quam arva et stagna et in modum solitudinum hinc silvae inde aperta spatia et prospectus, magistris et machinatoribus Severo et Celere, quibus ingenium et audacia erat etiam quae natura denegavisset per artem temptare et viribus principis includere. namque ab lacu Averno navigabilem fossam usque ad ostia Tiberina depressuros promiserant ...* 'However, Nero turned to account the ruins of his fatherland by building a palace, the marvels of which were to consist not so much in gems and gold, materials long familiar and vulgarized by luxury, as in fields and lakes and the air of solitude given by wooded ground alternating with clear tracts and open landscapes. The architects and engineers were Severus and Celer, who had the ingenuity and the courage to try the force of art even against the veto of nature and to fritter away the resources of a Caesar. They had undertaken to sink a navigable canal running from Lake Avernus to the mouths of the Tiber' (transl. J. Jackson, LCL).

² No information on Severus and Celer is found in, e.g., H. Furneaux, *The Annals of Tacitus*², (ed. w. introduction and notes), Oxford, 1907, 370; E. Koestermann, *Cornelius Tacitus Annalen IV* (Buch 14-16), Heidelberg, 1968, 246. Whether 'achitects and engineers' is a proper translation of *magistri et machinatores* is not of major relevance for the argument of this paper; see however below, section three, for the debate on the question.

and 'in parte aversa' on the *fistula*:
C. IVLIVS PINYTVS FEC.

The suggestion that we are dealing here with Nero's 'architects' has to my knowledge never been advanced before.³ Dressel in *CIL XV ad loc.* restricted his comments to proposing, with some doubts, that we might be dealing with a woman called *Antonia Livi*.⁴ He also suggested the reading [*Iu*]liorum or [*Ae*]liorum for the *gentilicium* of Severus and Celer.⁵

2. The statistical probability underlying the identification

My grounds for suggesting that we are dealing here with Nero's 'architects' are statistical. We need to consider the probability that — in any random pairing of two *cognomina* from Rome — one should end up with precisely 'Severus' and 'Celer'. As it turns out, the chances are extremely remote. By far the most plausible explanation for the pairing in *CIL XV 7393* of the two same names, Severus and Celer, that Tacitus joins together, is that we are not, in fact, dealing with a coincidence: these men must be the very same ones who are mentioned in Tac. *Ann.* 15.42.

Some numbers and some simple mathematical calculations will bear this out. In the inscriptions published in *CIL VI*, which surely are representative enough of the epigraphical sources surviving from the ancient city of Rome, and which I use here for the sake of convenience, there are, according to a recent estimate, 54,000 individuals.⁶ Not

³ See most recently on Celer (Tac. *Ann.* 15.42) in *NP 2* (1997), 1049 Nr. 4 (W. Eck) 'möglicherweise ist er mit dem *architectus* Celer in P. Ryl. 608 = *CPL* 248 identisch (1.28f.)'; W. Eck in *Lexicon Topographicum Urbis Romae (LTUR)* II, Roma, 1995, 78 s.v. 'domus: [-]lius Celer' (with no connection to the passage by Tacitus). Nothing of relevance for the identification proposed here is found in L. Guerrini, 'Celer', *EAA* II (1959), 456; *PIR*² C 619; *PIR* S 452; *RE* II.2A (1923), 1937 s.v. 'Severus Nr. 1' (Stein); *RE* III.2 (1899), 1870 s.v. 'Celer Nr. 14' (Fabricius). None of the editions of book 15 of Tacitus' *annales* that I have consulted make this connection; cf. in particular n. 2 above, and also, e.g., A. Arici (ed.), *Tacito, Annali*, Torino, 1952, 558; F. Römer (ed.), in *WS Beiheft* 6, Wien, 1976; P. Wuilleumier (ed.), in *Tacitus, Annales* iv (Collection G. Budé), Paris, 1978; R. Oniga (ed.), *Tacito II. Annali*, Torino, 2003, 1526-7.

⁴ The same doubts were expressed by M.-Th. Raepsaet-Charlier, *Prosopographie des femmes de l'ordre sénatorial (I-II s.)*, Lovanii, 1987, 91 no. 75, but not by W. Eck, 'Die *fistulae aquariae* der Stadt Rom: zum Einfluß des sozialen Status auf administratives Handeln', in idem, *Die Verwaltung des Römischen Reiches in der Hohen Kaiserzeit. Ausgewählte und erweiterte Beiträge*², Basel, 1998, 245-77, esp. 261.

⁵ It is worth noting in relation to the name of the *plumbarius* C. Iulius Pinytus that one Pinytus Divi Aug(usti) I(ibertus) appears in *AE* 1965, 335; after his manumission, he would naturally have been a 'C. Iulius'. There might be a relationship of some kind between him and the *plumbarius*. No significant meaning can be attributed to the figure *IIII* ('four') which appears in the stamp; see on numbers on Roman *fistulae* in general C. Bruun, *The Water Supply of Imperial Rome: A Study of Roman Imperial Administration*, Helsinki, 1991, 44-51.

⁶ I take this figure from O. Salomies, 'People in Ostia. Some Onomastic Observations and Comparisons with Rome', in C. Bruun and A. Gallina Zevi (eds.), *Ostia e Portus nelle loro relazioni con Roma* (Acta IRF 27), Roma, 2002, 135-159, esp. 136.

all of these individuals have a cognomen, and so I will use the round number 50,000 (individuals with a cognomen) for my calculations.

The indices to *CIL VI* contain references to all the *cognomina* in that corpus. My calculations show that, in *CIL VI* ‘Severus’ appears some 350 times, and ‘Celer’ some 145 times.⁷ These two names are certainly not rare,⁸ but it is easy to see that *one* name chosen at random from among the names recorded in ancient inscriptions from Rome has only a probability of $350/50,000 = 0.7\%$ of being ‘Severus’, while the chance that we might choose someone called ‘Celer’ is less than half of that, for $145/50,000 = 0.29\%$.

The probability that any *two* ancient Roman names that we happen to choose would be precisely Severus and Celer are, however, incomparably smaller. The probability that two particular names out of a total of 50,000 names may be randomly combined is calculated according to the formula for Multinomial Distribution:⁹

Total names = 50,000

The probability that the first name chosen at random is ‘Severus’ = $350/50,000$

The probability that the second name chosen at random is ‘Celer’ = $145/50,000$

The probability of ending up with one Severus and one Celer when combining two names at random from the pool of Roman names:

$$P(\text{Severus, Celer}) = \frac{2! \times (350 / 50,000) \times (145 / 50,000)}{1! 1!} = \frac{2 \times 50,750}{(50,000 \times 50,000)} \approx \frac{1}{25,000}$$

In fact one might argue that the chances are only half as great, for Tacitus’ expression is *Severo et Celere*, and I would suggest that it is highly significant that we have the same order in the inscription. When people become famous and are talked of as a pair — and I argue that this is what happened to Nero’s ‘architects’ — very often a standard order of reference is established: Laurel and Hardy, Gilbert and Sullivan, Rodgers and Hammerstein, Frank and Jesse James, Wilbur and Orville Wright, Lennon and McCartney etc., to give some examples from modern culture.¹⁰ There may be particular reasons why someone would wish to change the order and refer to, for instance, McCartney and

⁷ See L. Vidman, *CIL VI 6.2. Index cognominum*, Berolini, 1980.

⁸ These figures are, in proportion, not too far from the frequencies presented in I. Kajanto, *The Latin Cognomina*, Helsinki, 1965, 248 and 257. Based on his much wider survey of epigraphical material from all over the Roman world, Kajanto gathered a total of some 133,000 Latin *cognomina* (27), of which some 121,000 belonged to the imperial period (29), the period covered by *CIL VI*. Among the names from the imperial period, Severus appeared 1,214 times, and Celer 516 times (including senators). This gives a proportion, out of Kajanto’s onomastic material, of 1.0% for Severus and 0.43% for Celer. In Rome, the figures are 0.7% and 0.29%, respectively. It is worth noting that Kajanto collected only Latin *cognomina*, while the Indices of *CIL VI* include Greek *cognomina* too, which are even more numerous than the Latin ones. Therefore it would seem that among Latin *cognomina*, Severus and Celer are somewhat more frequent in Rome than in the Empire overall; Severus is about twice as common in both cases.

⁹ See M.R. Spiegel, J. Schiller and R.A. Srinivasan, *Probability and Statistics*² (Schaum’s Outlines), New York, 2000, 118, 138-9.

¹⁰ Compare an example from Rome: we find the same order between two brothers in *CIL XV 7760 Orfiti et Pisonis*, and in *CIL VI 9830 = ILS 7388 Orfiti et Pisonis lib. et proc.*

Lennon,¹¹ but generally, I think that most readers who are familiar with these names would agree that it feels odd to say 'Hammerstein and Rodgers wrote *The Sound of Music*' or 'Hardy and Laurel were great comedians'.

Arguably we are then looking for 'Severus and Celer', in that order, and can expect this combination in 0.002% of the cases where we encounter only two names, or about once every 50,000 pairs of names from Rome.¹²

In case any doubts still linger, regardless of the statistical calculations presented above, we shall cast a brief glance at the empirical material at our disposal. Needless to say, the pair Severus and Celer appears nowhere else in the epigraphical material that I have encountered. It must, however, be said that there are a number of inscriptions from Rome in which the two names Severus and Celer are both present. These cases are all inscriptions consisting of long lists of members of various organizations in Rome, mostly military units.¹³

It is obvious that the probabilities for the occurrence of 'Severus' and 'Celer' change when we are dealing with a group of some 680 names (as in *CIL* VI 200) or 350 names (as in *CIL* VI 975). In such large samples it would be more surprising if the names were not present, especially as both names clearly were favoured by military men.¹⁴ It is also important to note that the fact that two names appear scattered somewhere in these extensive lists of citizens or soldiers implies nothing about the relation of the bearers of these names, except that they were fellow members of an organization or *commilitones* in a very general sense. The military lists are normally divided in columns, which are structured according to a system which is not always alphabetical and must have something to do with service conditions. Only if the names Severus and Celer appeared in

¹¹ Cf. the attempt by Paul McCartney to change the order of the names on the copyright for some Beatles songs, from the standard 'Lennon — McCartney' to 'McCartney — Lennon', as reported in the international press in the spring of 2003.

¹² The probability in this case is calculated as follows: (a) the chance of drawing Severus as first name is 350/50,000; (b) the chance of drawing Celer as second name is 145/50,000 (the denominator in the second case should really be 49,999 but since we are operating with an estimate and the difference is minimal in any case, I use 50,000 for the sake of simplicity); (c) the combined probability of drawing first Severus and then Celer is $(350/50,000) \times (145/50,000) = 50,750 / (50,000 \times 50,000)$. This gives a 0.00203% probability of encountering our pair, or (roughly) 1:50,000.

¹³ Such inscriptions are: *CIL* VI 200 (the *tribus Succusana [corpus] iunior[um]*, Severus once, Celer twice); VI 975 (an inscription of the *vicomagistri*, Severus once, Celer once); VI 1056 (*coh. I vigilum*, Severus nine times, Celer three times); VI 1057 (*coh. V vigilum*, Severus 11 times, Celer 4 times); VI 1058 (*coh. V vigilum*, Severus eleven times, Celer once); VI 1063 (*vigiles*, once Severus, once Celer); VI 2071 (*Acta* of the Arval Brethren, Severus 8 times, Celer once); the Index of *CIL* VI does not give the whole picture here. As one can see in J. Scheid, *Commentarii fratrum Arvalium qui supersunt*, Rome, 1998, 140-1 no. 53, in this fragment from 84 CE, two senators, Ti. Tutinius Severus and L. Pompeius Vopiscus Arruntius Catellius Celer, are officiating, and each is mentioned several times); VI 32515 (*praetoriani* and *urbaniciani*, Severus 4 times, Celer once; the name Severus also appears nine times in the inscription as part of the consular dating *Severo II [consule]*); VI 32520 (*praetoriani*, Severus nine times, Celer once).

¹⁴ L.R. Dean, *A Study of the Cognomina of Soldiers in the Roman Legions*, Princeton, NJ, 1916, 19-20, 51-2, 61-2.

very close proximity in such a column would one be entitled to conclude that a relation *might* have existed between the two men. Such cases are exceedingly rare.¹⁵

All in all, it is clear that the pairing of Severus and Celer in Tac. *Ann.* 15.42 and in *CIL* XV 7393 is an exceptional and statistically significant occurrence that ought to be explained. We need to look for a connection joining these two names. But the names have no etymological or semantic connection that might explain the pairing. Nor do the names Severus and Celer have any connection in myth, legend or history, as far as one can see.¹⁶ Thus I can think of no other explanation why the names Severus and Celer are found paired twice other than that we are dealing with the same individuals in both cases.¹⁷

3. Celer as *architectus* in Egypt?

Before discussing the implications of this new source on Severus and Celer, another piece of evidence must be taken into account. An Egyptian papyrus written in Panopolis during the second part of the first century CE,¹⁸ that is, during the period when Nero's 'architects' were active, was discussed in detail some twenty years ago by Hannah Cotton. The papyrus contains a letter of recommendation to an imperial procurator Ti. Claudius Hermeros, written by one '[-]ius Celer', who signs the letter *Celere architecto*. Cotton suggested that we are dealing here with one of the 'architects' of Nero's Golden

¹⁵ In *CIL* VI 1056, in the *centuria Iuvenis* we find one Octavius Celer as no. 104 and one Spurius Severus as no. 105. In the same *centuria* we also have no. 35 Marius Severus and no. 78 Calpurnius Celer. Otherwise, only twice do we find both names within ten places: in *CIL* VI 1058, in the *centuria Antulli* as no. 95 T. Valerius Celer, as no. 105 C. Albicius Severus; and in *CIL* VI 32520, T. Lartius Severus from Tuder in col. VI.b.4 (enrolled in 143 CE), and L. Caninius Celer from Luca in col. VI.b.9 (enrolled in 144 CE).

¹⁶ H. Solin, *Namenpaare. Eine Studie zur römischen Namengebung*, Helsinki, 1990 and H. Solin, 'Coppie di nomi', in M. Pani (ed.), *Epigrafia e territorio. Politica e società, temi di antichità romane* 4, Bari, 1996, 353-69, has shown that names which belong together in a mythological, religious or historical context, like Amphio and Zethus, sometimes appear in the same family or slave *familia*. Other possible reasons for the pairing of certain names with more than average frequency, such as end-rhyme (*Volumni duo Verus et Severus* in *CIL* XIV 2495a), or consonance (*MM. Coccei Verecundus et Verus* in *CIL* VIII 12665 = *ILS* 1550) are not present in the case of Severus and Celer.

¹⁷ Hypothetically, it could be argued that precisely the pair mentioned by Tacitus served as inspiration for a father or a slaveowner with particular ambitions for two young boys. It is known that in some professions in Rome, notably among physicians and actors, there were 'trade names' that probably were taken up by professionals at some stage of their careers; see H. Solin, 'Die sogenannten Berufsamen antiker Ärzte', P. v. d. Eijk *et al.* (eds.), *Ancient Medicine in its Socio-Cultural Context* I, Amsterdam, 1995, 119-42; idem, 'Nochmals zu Berufsamen bei antiken Ärzten', *ActaClassUnivScientDebrecensis* 34-5 (1998-9), 389-93. I attribute no importance to Dressel's dating of the *fistula* to the late first or early second century CE (*CIL* XV, *ad loc.*). The precise dating of Latin inscriptions on paleographical grounds is difficult even under normal circumstances, and the *fistulae* constitute a case of their own.

¹⁸ H. Cotton, *Documentary Letters of Recommendation in Latin from the Roman Empire* (Beiträge zur klassischen Philologie 132), Königstein, 1981, 28-33, with 28-9 for the date.

House mentioned by Tacitus.¹⁹ This hypothesis and its implications need to be briefly considered, even though, as we now know, Celer was not a rare name in the Roman world.

Firstly, the fragmentary family name of Celer from Panopolis, [-]ius, is in agreement with the name we have in the *fistula*. Then there is the question of terminology to consider: is it conceivable that the same man styles himself *architectus* in a letter from Panopolis and is called *magister et machinator* by Tacitus? The outcome of much recent discussion of the tasks undertaken by Roman *architecti* is that at times, an *architectus* corresponded more closely to a modern master-builder or construction engineer of some kind than to an architect.²⁰ Precisely what a *magister* or a *machinator* was supposed to do is likewise debated,²¹ but evidently Tacitus thought such 'job descriptions' would cover overseeing the construction of the Domus Aurea, including its sophisticated special spaces, as well as the digging of a canal along the Tyrrhenian shore. There seems to be no reason why Severus or Celer might not have referred to themselves as *architecti*.

4. Two 'architects' with the same family name

The lead pipe from Rome, then, provides some information on the family names of Nero's 'architects', hitherto unknown. Severus and Celer bore, in fact, the same *nomen gentile*, as shown by the expression *duum [-]liorum* in our inscription, *CIL XV 7393*. Dressel argues that only a very short name, most likely Aelius or Iulius, would fit as a

¹⁹ Cotton (n. 18), 29, who notes that the hypothesis had previously been advanced by J. Rea; cf. the verdict of Eck (n. 3, 1997), 1049: 'möglicherweise'.

²⁰ For discussions of those professions in the Roman world that can be compared with the tasks of modern architects, see G. Downey, 'Byzantine Architects. Their Training and Methods', *Byzantion* 18, 1948, 99-118, esp. 108-12; P. Gros, 'Statut social et rôle culturel des architectes (période hellénistique et augustéenne)', *Architecture et société de l'archaïsme grec à la fin de la république romaine* (Coll. ÉFR 66), Rome, 1983, 425-52; W. Eck, 'Magistrate, 'Ingenieur', Handwerker, Wasserleitungsbauer und ihr Sozialstatus in der römischen Welt', *Mitteilungen des Leichtweiß-Instituts für Wasserbau der TU Braunschweig* 103, 1989, 175-217; M. Donderer, *Die Architekten der späten römischen Republik und der Kaiserzeit*, Erlangen, 1996; W. Eck, 'Auf der Suche nach Architekten in der römischen Welt', *JRA* 10, 1997, 399-404 (reviewing Donderer); J.C. Anderson, *Roman Architecture and Society*, Baltimore, 1997; J. De Laine, 'Organizing Roman Building and Space', *JRA* 13, 2000, 486-92 (reviewing Anderson); M. Wilson Jones, *Principles of Roman Architecture*, New Haven, 2000; T.N. Howe, 'Design Methods of Roman Architects', *JRA* 15, 2002, 465-8 (reviewing Wilson Jones).

²¹ J. De Laine, 'The Temple of Hadrian at Cyzicus and Roman Attitudes to Exceptional Construction', *PBSR* 70, 2002, 205-30, esp. 216 holds that the function of Severus and Celer was more than that of "master (-builder)" and "engineer"; cf. Donderer (n. 20), 55 and in general n. 20 above. On the Greek expressions ἀρχιτέκτων and μηχανικός see A. Bernand, *Pan du désert*, Leiden, 1977, 89-91, 96-8, 118-21, 191-2; Gros (n. 20), 428, 433 (including the related expression *machinator*); and J.-P. Rey-Coquais, 'Nom de métiers dans les inscriptions de la Syrie antique', *CCGG* 13, 2002, 247-64 on ἀρχιτέκτων, τεχνίτης, and μηχανικός. Two *machinatores* are known from Rome and its surroundings, both freedmen: C. Baebius Musaeus *conlibertus* in *CIL VI 9533 = ILS 7727*; L. Quinctius L. I. Nicephorus in *NSA* 1953, 302 no. 70.

completion of the name ending in *-lius* found on the fistula.²² That the *plumbarius*, the manufacturer of the lead pipe, is a 'C. Iulius' makes it slightly more probable that we are dealing with Iulii here,²³ perhaps even Gaii Iulii, and I will proceed on this assumption, although it is not essential for the rest of the argument.²⁴

Before continuing, it is worth mentioning a fact which has not been pointed out before: a certain C. Iulius Celer, or to be exact, *C. Iul. Celer*, appears in another *fistula* stamp, namely *CIL XV 7774* (= XI 3685c), found somewhat north of Ostia, in La Chiaruccia, ancient Castrum Novum. The abbreviated *gentilicium* makes it impossible to determine whether a nominative or a genitive is intended, that is, whether the person was the owner of a villa or a lowly *plumbarius*. As the *tria nomina* C. Iulius Celer can be found in other contexts as well,²⁵ it is risky to identify the Celer at La Chiaruccia with the Neronian 'architect'. A lead pipe stamp from Vercelli (Piemonte) presents a *plumbarius* C. Iulius Severus,²⁶ but it seems unlikely that he is identical with Nero's Severus.

Since we have now established that Nero's *magistri et machinatores* had the same *gentilicium* and perhaps were called Iulius Severus and Iulius Celer, it seems likely that they come from a common background. There are three *a priori* possibilities as to how they came to bear the same family name. We might be dealing with freeborn citizens (in this case, presumably brothers or some other kind of relations), or with fellow freedmen, or, as seems less likely, with companions who were given Roman citizenship at the same time and for the same reason, surely their professional skills.²⁷

The idea that most of the 'architects' and engineers in the Roman world came from the eastern parts of the Empire has enjoyed much support, but it has no foundation in the sources.²⁸ It would be difficult to argue for an eastern origin of Severus and Celer, based

²² Eck (n. 4), 263, suggested, *exempli gratia*, Aelius, Iulius, Catelius or Catilius. An autopsy of the stamp has unfortunately not been possible. The fistula is kept in the collection of the Museo Nazionale Romano and is now in the process of being prepared for scholarly access and investigation.

²³ In reality, there is surprisingly little correspondence between the family names of private owners of water conduits and those of the *plumbarii* who manufactured them, see Bruun (n. 5), 348-50; *CIL XV 7492a* may be the only certain case.

²⁴ As we saw above, this discussion of the *gentilicium* is not influenced by the identity of the *architectus* Celer from Panopolis, as only *-ius* can be read of his family name.

²⁵ See, e.g., *D. M. [.] Iulio Celer[.]* in *AE* 1988, 88 from Rome (= *Via Imperiale* [Tituli 3], no. 209), and *CIL VI 4579* (twice), 5662, 9405 iv.6, 840 = 30848. There is also the inscription *CIL VI 14647* = 34085 *Celeri Neronis Augusti l.* According to various earlier reports, the text ended in the letters A and O, which some have restored as *a(rchitect)o*, and H. Brunn, *Geschichte der griechischen Künstler* II², Stuttgart, 1889, 232 suggested that the inscription refers to the person discussed here. If this Celer were our man, as a freedman of Nero he would most likely be a 'Ti. Claudius' (unless freed by Gaius). Yet at *CIL VI 14647* the editor comments that the stone shows no trace of, nor space for, the letters A and O; similarly at *CIL VI 34085*.

²⁶ See G. Scalva, in L. Mercado (ed.), *Archeologia in Piemonte* II. *L'età romana*, Torino, 1998, 94: *C. Iul. Sever. Vercel. fac(it)*.

²⁷ In theory it is also possible that the identical family names are purely coincidental, and that the two had become Iulii independently of each other, one being, e.g., a freeborn citizen, the other a freed slave.

²⁸ This was stated already by Brunn (n. 25), 225-26; recently underlined by Donderer (n. 20),

on what we know of them, as they both carry a Latin cognomen, not a Greek one.²⁹ If one looks at the known instances of *architecti* in the western part of the empire in order to find out what social status would be most likely for Severus and Celer, one can only say that there are enough both freeborn and freedmen among them to make these two alternatives equally possible.³⁰

Unfortunately, the third person mentioned on the fistula, Antonia Livi (?), does not help us in determining the family and social background of Severus and Celer; she is otherwise completely unknown.³¹

5. From a water conduit on the Quirinal to residence patterns in Rome

The find spot of the *fistula* of the 'architects' Severus and Celer is firmly established by Dressel (*CIL XV ad loc.*) as 'ad radices Quirinalis al teatro Nazionale', i.e. halfway up the modern Via IV Novembre.³² This location³³ means that the lead pipe cannot have any connection to Nero's Golden House and that we are dealing with a different project of the two *magistri et machinatores*.

What, then, was the purpose of this conduit? Why does the stamp also mention a certain Antonia Livi (?), and in what capacity did these three people appear on the stamp? The most common interpretation is that the genitive in a *fistula* stamp indicates ownership of a concession of public water, and that this private water grant was meant for a *domus* owned by the proprietor of the conduit. Thus in the recent *Lexicon Topographicum* we find Antonia, Celer, and Severus duly listed as owners of a *domus*.³⁴ Not much effort has been devoted to understanding what this multiple ownership of the water conduit might, in fact, entail, and there has been no attempt to question the plausibility of

73; similarly Eck (n. 20, 1997), 404; De Laine (n. 20), 488 (*contra* Anderson [n. 20], 14).

²⁹ The possible presence of Celer at Panopolis at some point during his career does not, of course, prove his local origin, and it is, in fact, extremely unlikely that someone born in Egypt would have acquired a Latin cognomen there. Moreover, the Latin letter apparently written in his own hand — which is why we may presume that the language, too, must be his own — does not contradict the assumption that he came from a Latin speaking environment, even though he made a few orthographical errors and his style is not immaculate, as shown by Cotton (n. 18), 32-3.

³⁰ Donderer (n. 20), 71-6 (who does not discuss *magistri* and *machinatores*, 55, and therefore provides no basis for direct comparisons); Eck (n. 20, 1989), 188.

³¹ See Raepsaet-Charlier (n. 4), 91 no. 75: 'peut-etre épouse d'un Livius, peut-etre sénatoriale?'

³² Strangely enough Dressel in *CIL XV* does not give any references to previous publications. It is unclear to me if someone else had reported the discovery in print before, nor do I know how Dressel learned of it. My frequent perusals of the pre-1901 volumes of the *BCAR* and the *NSA* have not turned up any information on this particular lead pipe so far. The discovery was evidently made in, or shortly before, 1888, when construction work was undertaken on the site; see C. Bruun, 'Velia, Quirinale, Pincio: note su proprietari di *domus* e su *plumbarii*', *Arctos* 37, 2003, 27-48, esp. 32-3.

³³ The reference in the *CIL* was obviously to the late 19th-century Teatro Nazionale, not to the modern one, which is situated on the Viminal; see Bruun (n. 32), 33. There is room for confusion here, as can be seen in *LTUR II* (see the following note).

³⁴ See *LTUR II*, Rome, 1995, 33, 78, and 179.

the commonly accepted explanation, once the implications of multiple ownership have been worked out.

A fair number of *fistula* stamps are known in which more than one name appears.³⁵ In about a quarter of the over fifty such cases a woman's and a man's name appear together (both in the genitive), and the common view is that we are dealing in these instances with a married couple.³⁶ Regardless of whether this is consistently accurate (and I very much doubt it), this cannot be the situation here, for Antonia is accompanied by two men. Then again, in about half of the cases where we have multiple names on *fistulae*, it can be established that the persons named are (close) relatives.³⁷ For Severus and Celer this might well be the case, but there is nothing to indicate that Antonia (Livi ?) belonged to the same family. Nor do the three people seem to have shared one house, since Antonia's name is apparently followed by a reference to her husband (although doubts as to whether Dressel managed to decipher the damaged portion of the stamp correctly must remain).³⁸

One possibility is that we are dealing with a joint lead pipe, installed with the purpose of serving two properties (or even three), perhaps made possible because more than one water grant was given by the emperor at the same time, to persons living near one another.³⁹ If this were the case, Antonia lived in proximity to Severus and Celer. Continuing this hypothesis, it is interesting that Antonia holds a water grant in her own name, and cooperates with two other men, while her husband does not appear as an owner of the concession, only as the spouse of Antonia. *If* the letters following Antonia's

³⁵ A fairly complete list was presented in Bruun (n. 5), 94 n. 75, to which a few other discoveries should be added. See C. Bruun, 'Zwei Priscillae aus Ostia und der Stammbaum der Egrilii', *ZPE* 102, 1994, 215-25, esp. 218 n. 14, and the following note.

³⁶ The theory was first presented by G. Barbieri, 'Ostia — fistole acquarie inedite o complete', *NSA* 1953, 151-89, esp. 156-7 (= idem, *Scritti minori*, Roma, 1988, 290-1); accepted, e.g., by H.-G. Pflaum, *Les carrières procuratoriennes équestres sous le Haut-Empire romain* III, Paris, 1961, 996-7, and C.R. Whittaker in his Loeb Classical Library edition of Herodian, vol. I, London, 1969, lxxvii, 354 (regarding the marriage of the equestrian L. Didius Marinus to Cornificia, daughter of the emperor Marcus), 354 (the marriage of Vibia Sabina to L. Aurelius Agaclytus); also in G. Alföldy, 'Die Stellung der Ritter in der Führungsschicht des Imperium Romanum', *Chiron* 11, 1981, 169-215, esp. 195-6. Both marriages were also recorded by Raepsaet-Charlier (n. 4), 261 no. 294 and 622-3 no. 800; and by D. Kienast, *Römische Kaisertabelle*², Darmstadt, 1996, 140, albeit with a question mark. Some ten *fistula* stamps containing one male and one female name were listed in Bruun (n. 5), 94 n. 75, to which can now be added *MNIR* 58, 1999, 33 (see at n. 56 below) and *MDAIR* 108, 2001, 325.

³⁷ See Bruun (n. 5), 94 n. 75 for a list of 23 such stamps.

³⁸ There are a handful of stamps in which a woman appears as wife of her husband: *CIL* XV 7421 *Caepiae Proculae M. Regul(i uxoris)*; XV 7440 *Corneliae Tauri f. T. Axi*; XV 7441 *Corneliae L. f. Volusi Saturnini p.*; XV 7549 *Sulpiciae Q. f. Praetextatae Crassi*; XV 7580 [-] *M. f. Priscae C. Rufi[ni?] uxoris*; *BCAR* 1941, 191 no. 32 [*Pa*] *Juliae Fausti*.

³⁹ The Roman jurists mention a situation where two parties share the same conduit (*eodem rivo*) — see Dig. 43.20.5.1 (Iulianus, *libro quarto ex Minicio*) — although it probably concerned irrigation. According to Frontinus (*aq.* 109.4-5), water grants to multiple beneficiaries were possible, but he also notes that matters relating to water grants to *socii* were sometimes unclear.

name denote her husband, she can be added to the six senatorial women who name their husband in *fistula* stamps, although these other women (mostly dated to the first century CE)⁴⁰ always appear without any further partners.

That Severus and Celer should have been awarded the *ius aquae ducendae* in the city of Rome is not surprising. Even if the *fistula* is to be dated to a period after Nero's reign, skilled construction experts would continue to be highly regarded. We know that one of the emperor Claudius' physicians was given a water grant, and this indicates that experts closely connected with the court were given special privileges.⁴¹

The collocation of the names Severus and Celer in the stamp points to a shared water concession, which means that they shared the same house, or at least had neighbouring properties. According to Frontinus, a water grant was always given for a specific property, and it was not permitted to conduct the water elsewhere (*aq.* 109.6). A considerable number of prominent senators also appear in stamps of this type, pointing to a different and not infrequent pattern of ownership, as shown by stamps such as *II (duorum) Quintiliorum Condiani et Maximi (CIL XV 7518)* or *Sextiorum Torquati et Laterani (CIL XV 7536)*.⁴² It may be worth considering whether this also indicates a similar pattern of residence. The fact that we have over twenty *fistulae* from Rome with such 'family stamps', i.e. over 10% of all the persons mentioned in *fistula* stamps appear in such a context — and some similar stamps have been found elsewhere in Italy⁴³ — has not been taken into account by modern scholarship on residence patterns in the capital and the organization of the Roman house.⁴⁴ If all these stamps with multiple names indicate resident owners

⁴⁰ See n. 38 above for the names. The datings are provided by Eck (n. 4), 259-77 (*passim*).

⁴¹ Eck (n. 4), 249 (C. Stertinius Xenophon, physician of Claudius, in *CIL XV 7544*).

⁴² Other similar stamps are, e.g., *CIL XV 7438, 7472, 7511; BCAR 1905, 294*. For other references, see Bruun (n. 5), 94 n. 75.

⁴³ The are twenty-one stamps from Rome in which people who are clearly or most likely relatives appear: *CIL XV 7393* (our stamp), 7425, 7438, 7472, 7481, 7509 (?), 7510, 7511, 7515, 7517, 7518, 7523, 7525, 7536, 7545; *BCAR 1905, 294; BCAR 1906, 35 no. 3; BCAR 1907, 349; BCAR 1915, 220; Carta Arch. Roma II, 68; Epigraphica 1951, 23 no. 34*. Elsewhere in Italy we find seven more: *CIL X 1905; Ausonia 6, 1911, 48; Eph. Ep. VIII 376; NSA 1953, 165 no. 22; RPAA 64, 1991-92, 247; Suppl. It. 2, 52 no. 16; Suppl. It. 3, 34 no. 21*.

⁴⁴ There is no analysis along these lines in connection with the several *fistulae* that name senatorial Neratii, in *LTUR II, 144*; nor is there any in recent scholarship on aristocratic living in Rome, such as F. Guidobaldi, 'L'edilizia unifamiliare nella Roma tardoantica', in A. Gardina (ed.), *Società romana e impero tardoantico II*, Roma, 1986, 165-237, 446-60; W. Eck, 'Cum dignitate otium. Senatorial domus in Imperial Rome', *SCI 16, 1997, 162-90* (although on 164-5 there is, exceptionally, a brief reference to occasional multifamilial residences); L. Chioffi, 'Sulle case delle élites a Roma e dintorni. Supplemento al *Lexicon Topographicum Urbis Romae*', *BCAR 100, 1999, 37-52*; J.-P. Guilhembet, 'Les résidences aristocratiques', *Pallas 55, 2001, 215-41*. See too A. Wallace-Hadrill, 'The Streets of Rome as the Representation of Imperial Power', in L. De Blois *et al.* (eds), *The Representation and Perception of Roman Imperial Power* (Impact of Empire 3), Amsterdam, 2003, 189-206, who on 192 refers to medieval Rome and Genoa: 'The characteristic of such a city is the *torre* as the heart of the power of the family clan, surrounded by a local maze of narrow streets, the *contrada* or patch the family controls'. On this phenomenon in medieval Rome, see H. Broise and J.-C. Maire Vigueur, 'Strutture famigliari, spazio domestico e architettura

of houses, we may, in fact, be dealing with a situation reminiscent of medieval Rome, where certain neighbourhoods were populated by many branches and generations of a powerful family.⁴⁵

In fact, we happen to know that in the first century BCE Marcus Cicero and his brother Quintus lived in neighbouring *domus* at one point in time (Cic. *Att.* 4.3.2), but since the two men were *homines novi* from Arpinum, it is clear that the area was not traditionally inhabited by the Tullii, nor did the tumultuous events during the late Republic allow the family to establish a long term base on the slopes of the Palatine.⁴⁶ It has been pointed out that real estate changed hands very frequently among aristocratic families, while the composition of the upper class steadily underwent changes through social mobility, so that, in practice, permanent concentrations of one family in one quarter were uncommon.⁴⁷ Indeed our sources, which, to be sure, are very incomplete, give very few indications of such family neighbourhoods. Perhaps two generations of the Nummii lived on the same site in the fourth century⁴⁸ and the Flavii inhabited a certain quarter of the Quirinal before Vespasian became emperor.⁴⁹ There are also several *fistulae* and other sources naming Neratii from places not too far apart (although stretching over several city blocks), and it has been suggested that a few other families may have inhabited the same palace during several generations.⁵⁰ The ‘Domus dei Valerii’ on the Caelius shows inhabitation during four centuries (I-IV CE), but the written sources only refer to certain senators of the fourth century.⁵¹

Of the known inscriptions relating to family ownership of houses, the one mentioning the *domus Aripiorum et Ulpiorum Vibiorum* comes closest to our *fistula* stamps, but

civile a Roma alla fine del Medioevo’, in P. Fossati (ed.), *Storia dell’arte italiana* 12, Torino, 1983, 97-160, esp. 114-41. J. Hillner, ‘Domus, Family and Inheritance: the Senatorial Family House in Late Antique Rome’, *JRS* 93, 2003, 129-45, e.g. 130, argues outright against the existence of enduring topographical concentrations.

⁴⁵ A good example is the Cenci family, which established its seat in the Campus Martius, still identifiable today next to the piazza with the same name near the synagogue; see M. Bevilacqua, *Il Monte dei Cenci. Una famiglia romana e il suo insediamento urbano tra medioevo ed età barocca*, Roma, 1988. The Monte Giordano in the Campus Martius across from Castel S. Angelo is another example. The main building is now known as Palazzo Taverna but was once a centre for the Orsini family; see S. Carocci, ‘Baroni in città. Considerazioni sull’insediamento e i diritti urbani della grande nobiltà’, in É. Hubert (ed.), *Rome aux XIII^e et XIV^e siècles* (Coll. ÉFR 170), Rome, 1993, 137-73, esp. 142, 153.

⁴⁶ See *LTUR* II, 202-04 (E. Papi) on their houses. The younger Marcus Cicero survived, but his father’s house ended up in other hands.

⁴⁷ The Bruttii Praesentes are cited as an exception by Eck (n. 44), 188-90.

⁴⁸ *LTUR* II, 146-47 (F. Guidobaldi); Eck (n. 44), 190.

⁴⁹ *LTUR* II, 102-04 (W. Eck); Eck (n. 44), 165.

⁵⁰ As noted by Eck (n. 44), 188, who mentions the Acilii Glabrones and Scipiones Orfiti in addition to the Neratii. The issue here, however, seems to be the longevity of these *gentes* in the Senate rather than the existence of permanent family headquarters in Rome. As the *LTUR* II, s.v. ‘domus’ shows, nothing in particular is known about the residence of the Scipiones Orfiti during the empire, while for the Acilii the information is restricted to the consul of 438 CE (99-100).

⁵¹ Guidobaldi (n. 44), 186-88; *LTUR* II, 207 (F. Guidobaldi).

these two families are otherwise unknown and seem to be of non-aristocratic status.⁵² Other sources, juridical and literary, give very little support to the idea that adult sons would live with their fathers, or, to cite Garnsey and Saller, 'that adult brothers would share a common household as a *consortium*', except in cases where the families were poor.⁵³ Consequently, it is perhaps understandable that our *fistulae*, which list multiple family members, have not prompted a revision of the current views on aristocratic living in Rome. Yet, surely it is desirable that the *fistula* stamps naming brothers and close relatives also be considered in this context. We have to ask what it means when the senatorial Cornelii (Fronto and Quadratus), the Quintilii, the Petronii (Sura and Mamer-tinus), the Neratii, and the Sextii appear in such stamps. In addition, individuals of lower status, such as the Iulii Cefalii, the Iunii, and others, also need to be taken into account when pondering the social and civic significance of these stamps.

The next and final section will explore whether approaching these stamps from a different angle, i.e. assuming that these *fistulae* do *not* refer to the residence of the individuals mentioned, makes better sense.

6. Alternatives: no residence, no *domus*?

It is worth exploring whether in the case of Antonia and the two 'architects' a different explanation of the purpose of the conduit would be more persuasive. In recent years, I have argued that a name in the genitive on a *fistula* need not always refer to the owner of a *domus*,⁵⁴ and some new discoveries have provided further proof for this claim. For instance, the stamp *Roi Hilarionis* (CIL XV 7522) denotes a *plumbarius*, not the owner of some property,⁵⁵ while the stamp *M. Corneli Secun(di) et Sergiae Paulae*, found in the courtyard of the Casa di Diana at Ostia, obviously refers to the owners of an apartment building, not a *domus*.⁵⁶ Other conduits with a name in the genitive may have supplied water to industrial establishments, in particular baths.⁵⁷ There are still other possibilities, although they are not likely to have much bearing on the present case.⁵⁸

⁵² See *LTUR* II, 37 (F. Guidobaldi) for the text and the *domus*.

⁵³ P. Garnsey and R. Saller, *The Roman Empire. Economy, Society and Culture*, London, 1987, 129; similarly R. Saller, *Patriarchy, property and death in the Roman family*, Cambridge, 1994, 82: 'The jurists ... did not envisage the possibility of a joint household, either one headed by two brothers in *consortium* or one of three generations including daughters-in-law'. On a different possible pattern in aristocratic families labouring under economic hardship, see J. Crook, '*Patria potestas*', *CQ* 17, 1967, 113-22, esp. 117.

⁵⁴ Bruun (n. 5), 81-95; Bruun (n. 35); C. Bruun, 'Private Munificence in Italy and the Evidence from Lead Pipe Stamps', in H. Solin *et al.* (eds), *Acta Colloquii Epigraphici Latini (Helsingiae 1991)*, Helsinki, 1995, 41-58; idem, *JRA* 10, 1997, 389-98, esp. 396-8; idem, *JRA* 13, 2000, 498-506.

⁵⁵ Bruun (n. 32), 36-42.

⁵⁶ A. Marinucci, 'La distribuzione dell'acqua nella cosiddetta Casa di Diana', *MNIR* 58, 1999, 32-35, esp. 33.

⁵⁷ Bruun (n. 35); Bruun (n. 54, 1995), 48-52; R. Geremia Nucci, 'Le Terme del Faro di Ostia. Nuovi dati provenienti dallo studio delle *fistulae*', *ArchClass* 51, 1999-2000, 383-409.

⁵⁸ The genitive sometimes tells us who sponsored a particular public building, but this is not very likely in the centre of Rome, where the emperors jealously monopolized public building.

One aspect that has been neglected is the size of our conduit. Dressel (*CIL* XV 7393, *ad loc.*) gives no exact measure, but he writes ‘*magni moduli*’, which, in his language, means a diameter of at least 15 cm. As far as Roman water pipes go, this is a very large water pipe indeed. Normally, pipes intended for private individuals have diameters as small as 5 cm or even less, and a diameter of 15 cm does not indicate that a *fistula* is the combination of three common concessions of 5 cm water pipes. The area (*A*) of the pipe is decisive for the amount of water a pipe can hold, and using the formula $A = \pi r^2$ we get an area of 176 cm² for the pipe of Antonia and companions, while a 5 cm pipe has an area of ca. 20 cm². The larger pipe delivers over eight times as much water as the smaller one.⁵⁹

Today it is clear that all the largest *fistulae* found in Rome carry stamps of the emperor and were either water mains or supplied imperial or public structures. Only very few so-called private pipes have a diameter similar to the *magnus modulus* of our *fistula*.⁶⁰ I also suspect that in at least some of these cases we are dealing with pipes that in fact supplied public structures of some kind.⁶¹ The question now is whether the urban structure at the foot of the Quirinal could accommodate two (or even three) *domus* with extensive gardens — how else could such enormous amounts of water be used in a private context? — or whether we should surmise that the water had another purpose. A jointly owned bath is one possibility, and there would be nothing strange in a married woman investing on her own (at any rate if we assume that she was *sui iuris*) in a bath, for instance. Then again, the fact that Severus and Celer were famous builders, also interested in waterworks — probably not just canals (*Tac. Ann.* 15.42), for one would imagine that the delights which the Domus Aurea was to offer also included hydraulic miracles — raises further questions. Were it not for the name of Antonia, which seems odd in such a context (although she may not have been a senatorial lady at all, but an entrepreneur), one might suggest that their names are an indication that they were involved in some project meant to improve the urban infrastructure. No doubt there was a great need for building in this region after 64 CE, and not just under Nero. The great fire had caused such destruction that there must have been constant construction work in many parts of Rome throughout the Flavian era.

* * *

One can only hope that some unexpected archival find will one day shed more light on the circumstances of the discovery of the *fistula* of Severus, Celer and Antonia. What can be established with certainty is that in *CIL* XV 7393 we find a hitherto undiscovered reference to Nero’s *magistri et machinatores*. The interpretation one should give to their joint appearance, in the company of one Antonia, is more difficult to pin down. The possibility that we are dealing with the common residence of all three may be safely excluded, and I find it improbable that the pipe would have supplied two or three separate buildings inhabited by these individuals. It is more likely that we are dealing with a

⁵⁹ The volume also depends on the water pressure and the interior surface of the conduit, see A.T. Hodge, *Roman Aqueducts and Water Supply*, London, 1991, 215-44.

⁶⁰ Bruun (n. 5), 138.

⁶¹ See C. Bruun, ‘Grapti Aug. I. praedium’, in A. La Regina (ed.), *Lexicon Topographicum Urbis Romae. Suburbium* III, Roma, 2005, 39-40.

jointly owned piece of real estate, the result of an investment or perhaps an inheritance.

If this last suggestion seems less attractive, we can always return to the hypothesis of 'clan residences' in Rome, even though previous scholarship has found very little trace of such an urban phenomenon in our sources for imperial Rome.

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