

aluminium oxide 14.8% and silica 43.1%, which is equivalent to aluminium 7.7% and silicon 20.11%. Wiedeman and Bayer gave the chemical composition of samples taken from several old papyri without discussing the implication, which is very substantial. Table I of the Wiedeman and Bayer paper gives the chemical composition of ancient papyri and the one for recently manufactured papyrus, the latter without glue or clay, for comparison. The large content of aluminium and silicon (4.05 and 7.15%, respectively) in the ancient papyri clearly indicates the existence of clay in substantial quantity. In the fresh papyrus, the aluminium and silicon content is insignificant (respectively, 0.009 and 0.54%). Obviously, clay was used in the manufacturing of ancient papyrus and Pliny's description of the use of the muddy water of the Nile is independently confirmed.

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DON'T TRY THIS AT HOME: PLINY'S SALPE, SALPE'S *PAIGNIA* AND MAGIC

There are two women called Salpe who are said to have written books in antiquity: one is described by Athenaeus (7.322a) as the name or pseudonym of a writer of '*Paignia*', the other is cited by Pliny the Elder who calls her at one point Salpe obstetrix. Salpe is a rare name in antiquity—I know of no other examples—and few ancient books were ascribed to women. That two of these rare female writers should be called by the same name is something of a coincidence. That the name they shared was the very rare Salpe is *a priori* distinctly unlikely.¹ It is much more plausible that they were one and the same.

The first secure mention of Salpe seems to be in a fragment of Nymphodorus of Syracuse a writer of *Periploi*, tentatively dated to the third century B.C.² Athenaeus preserves a fragment of his '*Periplus of Asia*' in which he insists that far from being a nickname for one Mnaseas of Locri or Colophon, 'Salpe the author of the *Paignia* was a Lesbian woman'.³ There is little or no information as to the content of the work, although it has widely been assumed that it would have been erotic or pornographic,

¹ Wilamowitz noted the coincidence, but found it no more than 'spaßhaft', suggesting Salpe was a fictitious name used as a *nom de plume*, although, in fact, Athenaeus' comments suggest there was only one work of *Paignia* ascribed to Salpe in antiquity, and that some considered the name to be a pseudonym of Mnaseas, and others of a Lesbian woman, U. von Wilamowitz-Moellendorf, *Hellenistische Dichtung I* (Berlin, 1924), p. 83 n. 2. It should perhaps be pointed out that the saupe, the fish from which she took her name, was usually considered an unattractive shit-eating animal, and the nickname was unlikely to have been coined for the sake of flattery, see Wilkins and Hill ad Arcestratus F 28.

² *FGrHist* 572 F 5. Jacoby (ad Alcimus, *FGrHist* 560 F 1) thought that the discussion of Salpe had been lifted by Athenaeus wholesale from Apollodorus' ten-volume commentary *On Epicharmus*. Nymphodorus' dates are discussed in Jacoby's introduction to the author, where he follows Laqueur in giving a floruit at the end of the third century, or in the last thirty or so years at any rate (p. 603). There is also a reference to Salpe in a passage ascribed by Athenaeus to Alcimus, a historian Jacoby dates to the early fourth century. If this is regarded as an original part of Alcimus' text, Salpe's dates can be pushed back much further, although Jacoby himself discounts this possibility and brackets the reference in his text of the fragment.

³ Both Wilamowitz (loc. cit.) and Jacoby (ad 560 F 1) seem unduly sceptical about the existence of Nymphodorus' Lesbian woman, although women are more highly represented among the erotic and medical/magic genres than elsewhere. Salpe would be in the good company of *Lais*, *Elephantis* and *Philaenis*, whose work was also suspected of having been written by a man.

since Athenaeus or his source associates it with the work of the fifth-century writer Botrys of Messana described by Timaeus as *anaischuntographos* (*FGrHist* 566 F 35).

Pliny cites a Salpe six times in books twenty-eight and thirty-two of his *Naturalis Historia*. The first reference is in a chapter on the remedial uses of human saliva. After turning first to what Marcion of Smyrna had to say on the subject in his *de simplicibus effectibus*, he notes that Salpe was of the opinion that it could even cure numbness (or paralysis) if applied in the right places (28.38). In fact, body fluids seem to have been one of her specialities. Pliny reaches for her assistance again in Chapter 18 when he comes to discuss the uses of urine—good for the eyes and, when mixed with the white of an egg (ostrich preferably), effective against sunburn (28.66)—and in Chapter 23 where he notes that not all the properties of menses are noxious, since both Lais and Salpe hold that properly deployed it can act as an antidote to rabies and the tertian and quartan fevers (28.82). Rather more complicated is an aphrodisiac made by plunging an ass's genitals into boiling oil seven times and then applying the ointment to the relevant parts (28.262). At the end of Book 28 Pliny abandons his source for a while, but returns to her in Book 32 (135, 140) for some handy hints on hair removal (using bits of tuna you would normally discard) and silencing noisy dogs (a live frog placed in their food does the trick apparently).

It does not seem likely at first glance that these useful tips, which Wilamowitz summarizes as 'ekelhaften Rezepten' could be found in a volume of *Paignia*, which Gulick translates 'Bagatelles', and whose title conjures up automatically the ludic and erotic refinements of the Hellenistic and neoteric production of Philitas and Laevius.⁴ But there is another work entitled *Paignia*, which bears a much stronger resemblance to the fragments of 'Salpe obstetrix' preserved by Pliny. This is the collection of twelve magic tricks ascribed to Democritus.⁵ 'Democritus' *Paignia* are to be found in a diverse compendium of magic preserved on papyrus, number VII in Preisendanz's collection (*PGM* 7.167–86). The English translation of the magical papyri calls them 'Table Gimmicks', John Winkler calls them 'Playful Tricks', *LSJ*, 'jocular recipes' and Preisendanz himself, 'Scherzrezepte'.⁶ The general flavour of the collection can be easily illustrated by a few samples:

'To make bronze things look like they are made of gold: Mix native sulphur with chalky earth and wipe it off...

To stop an old woman chattering or drinking too much: Mince some pine and put it in her mixed wine...

To drink a lot without getting drunk: Eat a baked pig's lung...

To be able to copulate a lot: Grind up fifty small pinecones with two ounces of sweet wine and two pepper-corns and drink it.

To get an erection when you want: Grind up some pepper with some honey and coat the area concerned [*to pragma*]

The ingredients required by Democritus' *Paignia* are rather more palatable than Salpe's liberal use of bodily fluids, but the similarities between the two seem clear and obvious. The general form of the *Paignia* would fit Salpe's fragments easily. The

⁴ Wilamowitz, loc. cit., Gulick ad Athenaeus 7.322a.

⁵ For Democritus' reputation as a magician, see the references in Hans Dieter Betz (ed.), *The Greek Magical Papyri in Translation, Including the Demotic Spells*. Vol. 1, *Texts* (Chicago, 1986), p. 334, and J. J. Winkler, 'The Constraints of Desire: Erotic Magical Spells' in *The Constraints of Desire, The Anthropology of Sex and Gender in Ancient Greece* (New York, 1990), p. 80, with note.

⁶ Roy Kotansky in Hans Dieter Betz (ed.), *The Greek Magical Papyri in Translation*, p. 119, J. J. Winkler, loc. cit.

recipes for silencing old women and for producing an erection, in particular, have close parallels in Pliny's extracts. Apart from the specific examples, the most distinctive quality shared by both collections is their simplicity, which provides a stark contrast with the usual convoluted procedures and dense formulaic complexity of ancient medicine and magic. These are straightforward remedies for everyday (though occasionally serious) problems. Even the more recondite ingredients, Salpe's ass's genitals and Democritus' pig's lung, would require no more than a word with the butcher or the knacker's yard and a few minutes in the kitchen (the ostrich egg, although more difficult to get hold of, is only optional).

This brings us to the choice of title. It is true that some of the recipes among the *Paignia* of Democritus look like practical jokes and most translators and commentators have supposed that it is this playfulness that gives them their name which they have translated accordingly. However, this really only applies to three or at most four of the recipes, and it is more cogent to relate the title to the simplicity which characterizes all the recipes in the collection. *LSJ*'s third heading for *paignion* seems most appropriate here: 'metaph., *child's play*, of an easy task'. 'Democritus' *Sorcery for Beginners* seems to be the general idea. At any rate it seems clear from the character of the work ascribed to Democritus that the fragments of 'Salpe obstetrix' would be perfectly at home in a work entitled 'Paignia', which, therefore, turns out to be a close equivalent to Marcion's work, which Pliny translates *de simplicibus effectibus* and cites alongside Salpe at 28.38. In short, there seems no good reason to keep the two Salpes apart any longer. Separately they are of little use to anyone, combined we have an outline of a real presence in Hellenistic culture, an author, an origin, and a *terminus ante quem* in the third century, the title of the work and six fragments, with hints as to the genre, its tradition, and even to the author's social context.

This much seems secure. More speculation is needed to attempt to solve some of the loose ends within the tradition. Athenaeus (or Apollodorus), as we have seen, associates Salpe's *paignia* with those of Botrys, an author whom Timaeus characterizes as *anaischuntographos*, implying that in his '*hypomnemata*' he wrote of sexual practices, in particular oral sex. This obscenity could well have been a characteristic of Botrys in particular rather than the *paignia* as a whole, but on the other hand it is easy to see how Salpe's 'ekelhaften Rezepte' could come under the heading of *anaischuntographia*. Pliny's description of Salpe, at one point, as 'obstetrix' need not detain us either, since he never cites her for matters that could be described as obstetrically related. The simplest solution would be to see the epithet as a very general term applied to female medical-writers (the French translation of de Saint-Denis, for instance, renders her 'sage-femme'), or even more simply as a mistake on Pliny's part.

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