ACRAEPIA COUNTS: Π FOR Π(ΕΤΤΑΡΕΣ)

A poorly preserved inscription from Hellenistic Acraepia gives a list of fish for sale in the agora, each followed by a number, perhaps a maximum price. This was in effect a civic attempt at price-control, a gesture familiar from other Hellenistic cities. Price data for commodities in the Hellenistic world are scant, so that this inscription is especially precious. It is, therefore, worrisome that scholars have been unable to agree on the meaning of various numerals that appear in the text.

The attested numbers are: Χ, Η, Ι, Π. The system is essentially acrophonic. The first symbol is taken to indicate a chalk (one twelfth of an obol), the second a hemiobol, and the third an obol. The fourth, Π, has been the subject of debate. Most have assumed that the pi indicated π'(έντε), denoting five chalkoi. This assumption, however, appears to produce redundancies and flaws elsewhere in the system. Thus, scholars have advanced a host of different ameliorations, most recently the argument that Π is an abbreviation of an unattested Boeotian dialectical form of τεταρτημόριον, representing a quarter-obol, or three chalkoi. I propose here a less demanding solution.

Feyel assumed that Η must have indicated a hemiobol, i.e. six chalkoi. He observed that in this text Π never appears alone as a price, but is always paired (e.g. ΠΧ), so that ΠΧ must not have indicated

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1 Bottom fragm.: M. Feyel, Nouvelles inscriptions d’Akraiphia, BCH 60 (1936) 11–36, at 27–36; top fragm. with re-edit. of bottom: F. Salvat and C. Vatin, Le tarif des poissins d’Akraephe, in Inscriptions de Grece centrale (Paris 1971) 95–109 [SEG XXII 450], omitting the last eight lines, for which see Feyel. Corrections to lines 1–7 by P. Roesch, Sur le tarif des poissins d’Akraephe, ZPE 14 (1974) 5–9, at 9 [SEG XXXVIII 377; Etudes b Box hypotheses (Paris 1982) 286]. To the many and varied scholars who have treated the text, I am particularly indebted to Schaps, who is also the first to comment in detail on any of the lines.

2 Salvat and Vatin, Inscriptions de Grece centrale 109, thought this was a federal decree; D. M. Schaps, Small Change in Boeotia, ZPE 69 (1987) 293–296, at 293, has recently followed, despite the Roberts’ objections (Bull. epigr. [1972] 196) and Roesch’s demonstrations that both the decree and the agora were civic: Roesch, ZPE 14 (1974) 6–7; idem, Etudes b. hypotheses 282–286, at 286; see also D. Knoepfler, Gnomon 60 (1988) 222–235, at 234. With the apparent stipulation that sales be transacted with “clean weights”; the editors’ scratch marks (7) might suggest σταθμίς δικο[ίοις]; cf. e.g. IG II 1013.17–18: ὅποιος μηθείς τῶν πολεούντων τῷ ἀνωμούντων συμβαλλεῖσσα μέτρα [μ]υθεῖς σταθμίς χρήσει, ἀλλὰ δικαίως; cf. also μέτρα δικαίως: BGU VI 1268.16 (III BC); P.Lille I 24.54 (III BC); P.Heid. VI 383.12 (209 BC); P.Yale I 51.1.10 (184 BC); P.Amth. II 43.9–10 (173 BC); P.Tebi. III.1 824.16 (171 BC?); μέτρα ως δικαίως δικαίως: BGU VI 1293.12 (215/14); VI 1277.9 (215/14); XIV 2397.9 (214/13); P.Frankl. I 19.21 (143/13); BGU X 1946.10 (213/12); X 1951.4 (221–203); XIV 2390.33 (160/59); cf. also P.Cair. Zen. 1 59132.7–8 (256 BC): οἰκουμένος δὲν τῶν δικαίως [μεγάλως] σημείους μετρῆθαι λαύτοι; measuring συστάτης δικαίως: BGU IV 1239.19 (ca 250 BC); P.Heid. VI 369.15 (197 BC); P.Freib. III 34.26.37 (174/3); P.Amth. II 43.10 (173 BC); P.Erasm. 3.69.23 (152 BC); BGU IV 2161.7 (180–145); P.Lille I 21.54 (154–144); P.Dion. 17.24 (108 BC); SB V 8754.12 (49/8?); but Roesch, ZPE 14 (1974) 7 observes, “la pieyre porte assez clairement ΣΤΑΘΜΕΥ. ΚΟ. ΑΡΟΙΣ”, suggesting (p. 8) that ‘clean’ here meant ‘precise’; possible, but weight-scales in a fish market can become sloppy and encrusted with fish, that is, weighted; perhaps the stipulation mandated clean and dry scales, so as to prevent artificially inflated weights and prices. For requirements on weights elsewhere see e.g. IG V 1300.99–100; I.Delos II 509.1–2, 33–34.


4 This text is the basis of a reconstruction of the relative cost and rate of consumption of fish as against grain: T. W. Gallant, A Fisherman’s Tale [= Miscellaneous Graeca 7] (Ghent 1985) 39–41.


7 It is worth getting this detail right. Until we understand the number-system we cannot conclude, for example, with Gallant, A Fisherman’s Tale 40, that “[a]t Akraephe in the third century BC, fish was expensive, on average thirteen times more expensive than wheat”; for risks sometimes associated with such arguments from cliometrics see J. D. Sossin, Grain for Andros, Hermes 130 (2002) 131–145, at 137–141; on a possible date for the Acraephian text early in the second century BC: Roesch, ZPE 14 (1974) 9.
six *chalkoi* (5 + 1), which H denoted, but rather five. On this explanation the presumed syntactical relationship between P and X was not addition but multiplication. There is a logic to this suggestion. At Delos, for example, the symbol Π served both as a counter (Π + Π = 4 dr.) and as a modifier indicating that the units in question were drachmas (Π + Π = 15 dr.). In 1971, however, Salviat and Vatin published a second, larger, fragment of the Acraephian inscription, which seems to attest a price of P (Ta.ii.5) and also PXX (Ta.ii.19). On Feyel’s reckoning P alone ought never to have existed and PXX should denote six *chalkoi* and so should be redundant given H. Moreover, at B.8 Salviat and Vatin read ΗΠΧ (Feyel had read ΠΠΧ). On Feyel’s logic ΗΠΧ would have to amount to twelve *chalkoi* (6+6), or one obol, which ought to have been expressed simply with Ι. Finally the price ΗΠ (Ta.ii.21) 11 obols (6 + 5), would appear to be not only redundant with ΗΠΧ (Ta.ii.39, Ta.ii.7, 21, B.passim) but also inconsistent with Feyel’s observation that Π must be followed by Χ.

To salvage Feyel’s system we might declare P (Ta.ii.5) misread for PΧ; ΠΧΧ (Ta.ii.19) misread for ΗΧΧ; ΗΠΧ (B.8) misread for ΠΠΧ or ΠΧΧ; ΗΠ (Ta.ii.21) misread for ΗΠΧ. The text is in an admittedly poor state of preservation. But even if we were to grant so many misreadings, we would still be left with a system in which ΠΧ denoted five *chalkoi*, a compilation for which no parallel is found in Boeotian numerical notation.

Salviat and Vatin attempted to remove the problem by suggesting that when the mason carved ΗΠΧ, he really meant ΠΠΧ, i.e. that the mid-bar was a ligature joining Π to Π. They even went so far as to print ΠΠΧ for ΗΠΧ throughout their text. But Η is very often a component of compound numerical characters in Boeotia (e.g. ΗΧΕ [5 x 100], ΗΕ [3 x 100], where ΗΕ = 100). That ΗΠ should represent a ligature between Π and Π, rather than H and Π is no more likely than a system in which ΠΧΧ equals six *chalkoi*. Salviat and Vatin constructed a system that construed Π as five, which was an improvement, but replaced redundancy with implausible orthography, which was not. The many redundancies in Feyel’s system notwithstanding, that of Salviat and Vatin was no more plausible.

D. M. Schaps has sought a new solution, suggesting that P stands not for *pente*, but for a putative Boeotian dialectical variant of tetartemorion, which denoted a quarter-obol piece worth three *chalkoi*. The proposal is clever. If the resulting system produced no redundancies it might justify positing an otherwise unattested Boeotian form. But it does. According to Schaps’ system HXXX (Ta.ii.41) and ΗΠ (Ta.ii.21) both denote nine *chalkoi*: HXXX = 1/2 ob. i.e. 6 ch. + 3 ch. = 9 ch.; ΗΠ = 1/2 ob. + 1/4 ob. i.e. 3 ch. = 9ch. At B.36 Feyel read μνάν ΗΠΑ, thinking (p.33) that T denoted tetartemorion. If this hunch could be proven correct Schaps’ argument would collapse. But a generation later Salviat and Vatin could not even read the line, or apparently any line after B.32. In fact, the entire text below B.32 is a mess. Feyel read B.35–37 as follows: ΤΑΝΕΞΕΝΤ | μνάν ΗΠΑ | ΝΑΝΓΧ vac. This does not inspire confidence that ΗΠΑ is a number at all. Schaps thought Feyel’s assumption improbable on grounds that if some other character denoted a tetartemorion it would be strange not to find that character elsewhere in the inscription. This, however, assumes not only that one of the prices must have included a tetartemorion, which is not necessary, but also that Acraephia used an abbreviation for tetartemorion in the first place, which is the fact Schaps is trying to establish. A tetartemorion, however, was not simply three *chalkoi* or the equivalent weight, but rather a quarter-obol piece. Acraephia did not, so far as we know, strike quarter-obols. We can generate the Boeotian form for tetartemorion, but we still do not know whether tetartemoria were struck at Acraephia, much less whether another city’s fractionals

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8 Feyel, *BCH* 60 (1936) 32–33.
9 E.g. I.Delos I.362.A.12: MXXXXΔΩΠΠ = 13,014 drachmas; II 445.5: ΠΔΓ.
11 It is not clear from his comments, Schaps, *ZPE* 69 (1987) 296 n. 9, whether he considered Τ for τρίοβολον more likely.
12 Moreover, the word tetartemorion is attested on stone only very rarely and apparently never in Boeotia.
enjoyed sufficient Acraephian circulation to earn their own abbreviation in state legislation. The problem is not dialect possibilities but numismatic realities. Whereas Salviat and Vatin removed all redundancies, but introduced an unlikely ligature, Schaps pruned the number of redundancies to one, but introduced an unattested Boeotian word for an unattested Acraephian object.

It is, to my eye, almost unbelievable that Π should not indicate five chalkoi; the letter pi is so commonly found in Boeotian compound numerical characters, where it indicates multiplication by five: e.g. ΠΕ (= 5 × 100);13 and ΠΕ stands very frequently for πεντήκοντα.14 In most place Π did indicate pente. Nevertheless, Feyel’s system does not, on present evidence, appear viable, and neither does that of Salviat and Vatin.

But before we posit an otherwise non-existent dialectical form for a fractional coin that Acraephia may never have issued we should consider another possibility. For countless inhabitants of central and northwest Greece, including Boeotians,15 the number four began with the letter pi: πέταρος.16 Perhaps Π indicated not π(έντε) but π(έταρος), denoting four chalkoi. If so, then we would have a system with two redundancies, but entirely lacking in implausible ligatures and unattested words: the uncertainly read ΠΧΧ (A.i.19) would be redundant given Η (A.ii.4, 6; B.28) and ΗΠΧΧ (B.8) given I. Perhaps the first was in fact HXX and the second simply HTX, which not only seems to be visible in the photograph published by Feyel (BCH 60 [1936] pl. IV), but is also the most common price in the inscription and close to what Feyel had read in the first place (HTX).

I suggest, then, that whereas in Greek documents Π usually means “five”, here it means “four”, and if for us that is cause for confusion, we may rest assured that for the fish-eaters and coin-counters of Hellenistic Acraephia, it was not.

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15 As Schaps, ZPE 69 (1987) 295, knew.

16 IG VII 1738.5; 2418.10; 2420.22, 36–37; 2431.7; 3171.C.38, 51; 3193–3195 passion; SEG XXVI 675.5, 9, 11 (Larisa); 676.4, 5–6, 8, 17–18; XXXI 575.9 (Larisa); XXXVI 548.2–3 (Metropolis in Thessaly); M. Missailidou-Despotidou, A Hellenistic Inscription from Skotoussa (Thessaly) and the Fortifications of the City, ABSA 88 (1993) 187–217, at 188–191, A.73, B.22, 23, 24–25, 28–29; also the ordinal πέτατος (–τός): IG VII 3170.13 (restored); 3172.a.142, 3176.2–3; Missailidou-Despotidou, ABSA 88 (1993) 188–191 at B.3, 4, 10, 18, 28, 39, 66, 69; also SEG XXXVII 494.10 (Thessalian Metropolis): παρ πέτατον ετες.