HESPERIA 79 (2010)
Pages 253–303

FISH LISTS IN THE WILDERNESS

The Social and Economic History of a Boiotian Price Decree

ABSTRACT

This article presents a new text and detailed examination of an inscribed Hellenistic decree from the Boiotian town of Akraiphia (*SEG* XXXII 450) that consists chiefly of lists of fresh- and saltwater fish accompanied by prices. The text incorporates improved readings and restores the final eight lines of the document, omitted in previous editions. The discussion covers the arrangement of the text and the sources of the lists, one of which probably originated in a customhouse in the nearby port of Anthedon, as well as the larger social and economic context of the decree, which has been generally misunderstood.

An enigmatic Hellenistic inscription on two stones from the Boiotian town of Akraiphia (*SEG* XXXII 450) consists chiefly of a long list of fish names accompanied by numbers that are presumed to be prices.[1] Although its importance has been recognized by some scholars, and the evidence it provides lies at the heart of influential recent work on fishing and the ancient economy, the inscription nevertheless remains little studied and its wider implications largely unexplored. This may be attributable in part to its origins in the murky waters of Hellenistic Boiotia, but it is also the case that many of the document's most important features have been misinterpreted.

This reevaluation of the decree is divided into six sections. It begins with a review of the modern history of the inscription and a new edition of the text, which, apart from the short prescript, appears never to have been reexamined, in spite of deficiencies in the *editio princeps,* including the omission of the final eight lines. This reexamination leads in the following section to new conclusions about the composition of the document and its

1. For Akraiphia, see Fossey 1988, pp. 265–275, with references; more recently *Der neue Pauly* I, 1996, cols. 408–409, s.v. Akraiphia (P. Funke). Various forms of the name are attested in antiquity (Ἀκραίφια, Ἀκραιφία, Ἀκραιφίαι, Ἀκραίφιον, Ἀκραίφνιον, Ἀκραίφνια), giving rise to many transliterations. Once called Karditsa, the modern village has been officially renamed Ακραίφνιον.

I would like to thank the 9th Ephorate of Prehistoric and Classical Antiquities and especially the ephor, Vassilis Aravantinos, for granting me permission to study and republish this inscription. I am also indebted to Joshua Sosin and Kent Rigsby for their careful criticism of early drafts, to the anonymous *Hesperia* referees for valuable suggestions, and to Mark Landon and Molly Richardson for many improvements to the text. All translations and photographs are my own.

arrangement on the stones. In the third and fourth sections I explore the origins of the two separate lists of fish that appear in the document, and the relationship between those lists and the economies of Akraiphia and the neighboring port of Anthedon. In the fifth section I reexamine the prices recorded in the inscription and their implications for our understanding of the role of fish in ancient food culture and the importance of marine fishing in the Greek economy. Finally, I argue that the social context of this price decree is more complex than previous discussions suggest.

THE HISTORY AND TEXT OF THE INSCRIPTION

In 1934 M. P. Guillon extracted a badly weathered limestone block from the superstructure of a modern well in the village of Karditsa, on the site of ancient Akraiphia. This stone, block B of the inscription, preserved traces of at least 41 lines of text recognizable as an alphabetic list of fish names accompanied by acrophonic numerals. In his publication of the inscription, Michel Feyel managed to read the names of 17 fish, only six of which were accompanied by a wholly legible number.[2] Nevertheless, he deduced that the inscription represented a list of maximum prices expressed in obols and chalks per mina, and he dated it, on the basis of lettering and dialect, to the early 2nd century B.C. The date is consistent with his interpretation of the list as a product of the political and social upheaval in Boiotia during this period, when, according to Polybios, the increasing power of demagogues forced the *strategoi* to enact popular decrees on behalf of the poor.[3]

Feyel's publication attracted little attention. Rostovtzeff cited the "curious inscription from Acraiphia" in two footnotes in his *Social and Economic History of the Hellenistic World*.[4] D'Arcy Thompson and Léon Lacroix recognized the inscription's importance for the study of Greek fish names and published, simultaneously, short articles on the names that Feyel had managed to read.[5] Otherwise, scholars largely ignored the inscription until 1965, when Christian Llinas discovered in the village a second inscribed block, which also contained an alphabetical list of fish names with prices and apparently belonged to the same inscription. Claude Vatin eventually published the text of this new stone (block A), together with a revised edition of the text of the first (block B).[6] Paul Roesch soon republished the prescript on block A (lines A.1–A.i.7), which contains the names of the magistrates responsible for the inscribing of the decree and a clause stipulating that the fishmongers employ certified weights.[7] In only three full lines and four half-lines, Roesch corrected Vatin's text in nearly a half-dozen places, and his discussion did much to rectify "certaines inexactitudes sur les institutions d'Akraiphia et de la Béotie."[8]

Surprisingly, no one appears ever to have reexamined block B or the better part of block A (lines A.i.8–42 and ii.4–42). Meanwhile, Vatin's publication has worked its way to the center of a number of important discussions, ranging from the role of price controls in Classical and Hellenistic poleis to the nature and scale of ancient fisheries and their importance

2. Feyel 1936, pp. 27–36.

3. Feyel 1936, p. 36.

4. Rostovtzeff 1941, vol. 3, p. 1369, n. 35, and p. 1615, n. 128.

5. Thompson 1938; Lacroix 1938. Feyel hazarded a specific identification for fewer than a half-dozen of the named fish, not surprising given the notorious difficulties involved in matching ancient fish names with the species known to modern science. Feyel's task was further complicated by the fact that Thompson's *A Glossary of Greek Fishes* (1947) would not be published for another decade. Both Lacroix and Thompson were able to improve Feyel's commentary, and Lacroix proposed a number of restorations (1938, pp. 55–56) that were subsequently confirmed.

6. Vatin 1971 (= *SEG* XXXII 450).

7. Roesch 1974 (= *SEG* XXXVIII 377).

8. Roesch 1974, p. 5.

Figure 1. Block B, Thebes Museum

to Greek economies. With these larger questions in mind, I received permission in 2004 to study the blocks in the Thebes Museum. Block A could not be located, but I was able to examine block B (Fig. 1) on a number of occasions.[9] It became apparent that Vatin's text could be improved in many places. I also determined that an additional eight lines on block B, recorded by Feyel but omitted by Vatin from his edition, almost certainly belong to the same inscription. The restoration of these lines leads to very different conclusions about the arrangement of the text on the stones, the nature of the lists it contains, and the decree's larger social and economic context. I begin by presenting a revised text.[10]

Thebes Museum, no inv. nos. (in 1936, block B had the provisional inventory number 10)

Block A: H. 0.70, W. 0.65, Th. 0.18 m; L.H. 0.010–0.014 m.

Block B: H. 0.74, max. W. 0.41, max. Th. 0.63 m; L.H. 0.010–0.016 m.

Edd. Feyel 1936, pp. 27–36 (B.1–41); Vatin 1971 (A and B.1–33) [= *SEG* XXXII 450]; Roesch 1974 (A.1–7) [= *SEG* XXXVIII 377]. Photographs: Vatin 1971, p. 96, fig. 1; p. 101, fig. 2; p. 103, fig. 3 (block A); Feyel 1936, pl. 4 (block B).

Bibliography: Lacroix 1938; Thompson 1938; Rostovtzeff 1941, vol. 3, p. 1369, n. 35, p. 1615, n. 128; Daly 1967, pp. 20–21; J. Robert and L. Robert, *BullÉp* 1972, 196; Étienne and Knoepfler 1976, p. 302, n. 133; Gallant 1985, pp. 39–42, appendix 2; Schaps 1987, 1988; Fossey 1988, p. 275; Curtis 1991, p. 170; Davidson 1997, p. 187; Magnetto 1997, p. 386, n. 3; Migeotte 1997, p. 49; Bresson 2000a, pp. 174–177; Rose 2000, pp. 518–519; Sosin 2004; Collin-Bouffier 2008, pp. 101–103, and appendixes 2 and 3, pp. 117–120; Mylona 2008, pp. 103–106.

9. When I visited the Thebes Museum on May 18, 2004, I found block B set on its side immediately behind the guard shack in the courtyard. I could not locate block A. I returned to the museum on May 22, where I met Yannis Kalliontzis, entrusted by the Greek Epigraphic Society with the task of compiling a catalogue of the museum's 3,000 or more inscriptions. He had not seen block A. I can find no reference to anyone having seen it after Paul Roesch, who reported having examined it at the museum in 1972. The newly remodeled museum was scheduled to open in May 2009 but as of May 2010, it remains closed. It is my hope that when the museum opens, block A will have resurfaced.

10. Since I have been unable to examine block A, I have not attempted to improve the readings of A.1–42 published by Vatin and Roesch, apart from adjusting spacing, enclosing restored text in square brackets, indicating numerals by means of a distinctive font, restoring ligatures at A.i.39, A.ii.7, and A.ii.22, and offering modest restorations or emendations at A.i.18 and A.ii.12 (discussed below).

ca. 225–175 B.C.

BLOCK A

τὺ ἀγώναρχυ τὺ ἐπ' Ἀριστοκλεῖος ἄρχοντος,
Ἀμινίας Διονουσίω, Δικῆος Διονουσίω,
Ἰαροκλεῖς Ἐγχόρμαο, ἐσταλοκόπεισαν τὰ δεδο[γμένα]

	οὐπὲρ τῶ θαλαττήω·	Κουνοπρείστιος Η
5	τὼς δὲ τὸ θαλαττῆον	Κουνὸς καρχαρίαο Π
	πωλίοντας πωλῖμεν	Κανθάρω παντὸ[ς] Η
	σταθμῶ[ς] κο[θ]αροῖς·	Κοκκούκων ΗΠΧ
	Ἀλφειστᾶο [.]ΧΧ	Κορακίνων [price]
	Ἀμία[ς .]ΧΧ	Καλλιωνούμω [price]
10	Ἀγνάθω [price]	Λάβρακος [μέδδονος?] [price]
	Ἀρκάνω [. .]ΧΧ	τῶ μίονος τῶ μναιήω [price]
	Ἀλλοπιάων̣ [price]	Μούρω καττὸ ἐπά[νω]
	Α̣Γ[- - - - - -] [price]	Μ̣[ε]λ̣α̣ν̣ό̣[ρ]ω̣ν [price]
	Αλακ[. . . . .]ω κοθαρῶ [.]	Π̣[.]αρρ[- - - - -] [price]
15	Αν[.]κω[- - -] [price]	[- - - - - - - - - - - - - - - -]
	Α[- - - - - - -] [price]	[- - - - - - - - - - - - - - - -]
	Βογγλώτ[τω] [price]	[- - - - - - - - - - - - - - - -]
	Βατίδος κοθαρᾶς	[- - - - - - - - - - - - - - - -]
	Ἀβοράτω Π̣ΧΧ	[- - - - - - - - - - - - - - - -]
20	Βορατ[- - -] [price]	Ῥινοβάτω [- ? - price]
	Βατράχω μέδδονος [.]Π	Ῥίνας κοθαρᾶς ΗΠ
	[- - - - - - - - - - -]ΧΧ	Ῥαφίδων ΗΠΧ
	[- - - - - - - - - - - -]	Σ̣κ̣α̣ρήνας ΗΧΧ
	[- - - - - - - - - - - -]	Σκορπίω μέδδονος [price]
25	[- - - - - - - - - - - -]	τῶ μνα[ιήω] [price]
	[- - - - - - - - - - - -]	τῶ μίονος [price]
	[- - - - - - - - - - - -]	[Φά]γρω τῶ μέ[δδονος] [price]
	[- - - - - - - - - - - -]	Φά[γ]ρων μναιήων [price]
	[- - - - - - - - - - - -]	[τῶ] ἄλλω [- ? - price]
30	[.]Α̣Π̣Ν̣ [- - - - - -]	Χ̣[- - - - - - - - - - - - - - - - - -]
	[. . . .]Α[- - - - - -]	[- - - - - - - - - - - - - - - - - -]
	[. . . .]Τ̣Τ̣Α̣Ο̣[- - - -]	[- - - - - - - - - - - - - - - - - -]
	[.]Α[- - - - - - - - -]	Χαρακ[ί]αο [price]
	[Β]εμβράδω[ν] [price]	Χ[- - - - - - - - - - - - - - - - -]
35	[.]αλα[- - - - - - - -]	[- - - - - - - - - - - - - - - - - -]
	Γόνγρω τ̣ῶ [- - - -]	[τῶ ἄλλω π]αντὸς [price]
	τῶ ὀμφάλω [price]	[- - - - - -]ΩΝ[- - - - - - - - - -]
	τῶ ἄλλω [- ? - price]	μνᾶς Π[- - - - - - - - - - - - -]
	Γελαβρίαο ΗΠΧ	[- - - -]Ε[- - - - - - - - - - - -]
40	Γαλιῶ μέδδονος [. .]Χ	[- - - -]ΗΜΑ[- - - - - - - - - -]
	μναιήων ΗΧΧΧ	[- - - - - - - - - - - - - - - - - -]
	[- - - - - - - - - - - -]	[- - - - - - - - - - - - - - - - - -]

BLOCK B

Ἐρουθρῶ μίο̣ν̣ος [price]
Ἐψειτῶ[ν] ἐπά[νω]
Θραιττ[ί]δ̣ων Π̣Χ
Θουννοκείτ[ω τῶ]
5 οὐπο[γ]αστρίω ΙΙΧΧ
τῶ ἄλλω Ι[.]Χ
Θουννίδων ΙΧΧ
Ἴχλας ΗΠΧ
Κοττούφω [.]Π̣Χ
10 Ἰθουλίδων ΗΠΧ
Ἱππούρω Ι[- -]
Φίωπος ΗΠΧ
Κόριος *vvv* [price]
Κιθάρω μέδδονος
15 μναιήω ΗΠΧ
τῶ ἄλλω παντὸς [price]
Κεστρεῖος τῶ μέδ⟨δ⟩ο̣ν̣ος
ε̣ἰμι[μ]ν̣α̣ιήω Ι τ̣ῶ̣
μίονος ΗΠΧ
20 ΛΙΜΝΗΩΝ
Β̣αράκω τῶ̣ μναιήω [price]
τῶ ἰμιμναιήω ΗΠΧ
τῶν μιόνων τᾶς μ̣ν̣[ᾶς] [price]
Λαβρίχω τῶ μναιήω [Η]Χ̣Χ̣
25 τῶν μιόνων τᾶς μνᾶ̣ς̣
ΠΧ *vac*
Πουκρίδων τᾶς μν-
ᾶς Η *vac*
Β̣αλ̣λεκ̣[- - - -] [price]
30 Χα̣κ̣ακος πουρα̣[μ]ω̣ Π
Ἐγχέλιου̣ος μ̣έ̣δ̣δ̣ο̣[νος]
τᾶν̣ μνᾶν ΙΠΧ
ΤΑΣ̣Τ̣ΕΘ̣Ν̣Α[. .]Α̣Σ[- - -]
Πλατινι[- - - -]
35 τὰν ἐξεντ[ερ- -]
μνᾶν Η τὰ̣[ν - - -]-
νων ΠΧ *vac*
τὰν δὲ δαπ̣[- - -]-
ΝΕΙΣ̣Σ̣ΜΑ̣Ν̣Ι̣[- - - -]
40 ΩΛΙ̣ΝΩ[.]Α̣Ν̣[- - -]
[- - - - - - -]Π̣[- - -]

HΠ indicates ligature. I give the readings of previous editors exactly as printed in their minuscule texts. **A.1** ἄρχοντες Vatin, ἄρχοντος Roesch. **A.3** Ἐπχόρμαο Vatin, Ἐγχόρμαο Roesch; ἐσταλοκόπεισαν κὰτ τὰ [. . . . . .] Vatin, ἐσταλοκόπεισαν τὰ δεδο[γμένα] Roesch. **A.i.4** οὔπερ Vatin, οὐπέρ Roesch. **A.i.7** σταθμῦς ΑΙΙΙ[.]οις Vatin, σταθμῦ[ς] κο[θ]αροῖς· Roesch. **A.i.9** Ἀμία[ς.] XX Vatin. **A.i.11** [. .] XX Vatin. **A.i.18** Βατίδος κοθαρᾶς [ ] Vatin. **A.i.19** ΠXX Vatin. **A.i.20** Βορά̣τ[ω]?, Βορατ[ ] Vatin. **A.i.22**] XX Vatin. **A.i.38** τῶ ἄλλω [παντὸς] [price]?, τῶ ἄλλω [ ] Vatin. **A.i.39** ΙΠΧ Vatin. **A.ii.7** ΙΠΧ Vatin. **A.ii.10** Λάβρακος [ ] Vatin. **A.ii.12** κὰτ τὸ ἐπα [ ] Vatin. **A.ii.20** Ῥινοβάτω [κοθαρῶ] [price]?, Ῥινοβάτω [ ]Vatin. **A.ii.21** ΗΠ Vatin. **A.ii.22** ΙΠΧ Vatin. **A.ii.29** [τῶ] ἄλλω [παντὸς] [price]?, [τῶ] ἄλλω [ ] Vatin. **B.1** [Ἐ]ρουθρῶ - - - - - - Feyel, Ἐρουθρῶ μίονος Vatin. **B.2** Ἑψειτ[ῶν - - - - - - Feyel, Ἑψειτῶ[ν] επα[Vatin. **B.3** Θραιττ *vac* ων Ι - - - - - - Feyel, Θραιττ[. .]ων IX Vatin. **B.4** Θουννῳ - - - - - - - - Feyel, Θουννοκείτ[Vatin. **B.5** ΟΥΠ . . ΛΙΣΤΡΩΙΧΧ Feyel, οὐπο[γ]αστρίω ΙΙΧΧ Vatin. **B.6** τῶ ἄλλω Ι *vac* Feyel. **B.7** Θουννίδων IXX *vac* Feyel. **B.8** (Κ?)ίχλας (i.e., ⟨Κ?⟩ίχλας, Κ omitted) ΙΠΧ *vac* Feyel, Ἴχλας ΙΠΧX Vatin. **B.9** Κοττούφω ΙΠΧ Feyel, Vatin. **B.10** Ἰθουλίδων ΠΧ *vac* Feyel, Ἰθουλίδων ΙΠΧ Vatin. **B.11** Ἱππούρω - - - - - - - - Feyel, Ἱππούρων [ ] Vatin. **B.12** Ρίωπος Ι . . . ? Feyel, ΙΠΧ Vatin. **B.13** Κόριος *vac* . . . ? Feyel, Κόριος [ ] Vatin. **B.15** ΙΠΧ Feyel, Vatin. **B.17** μέδ(δ)ο[νος?] Feyel (i.e., μέδ⟨δ⟩ο[νος?], Δ omitted), μέδονος Vatin. **B.18** εἰμ[ι]μν[α]ϊήω Ι . . . ? Feyel, εἰμιμναιήω Ι[ ] Vatin. **B.19** ΙΠΧ Feyel, Vatin. **B.21** Βαράκω τῶ μναϊῆω . . . ? Feyel, Βαράκω τῶ μναιήω [ ] Vatin. **B.22** τῶ ἰμιμναϊήω .ΠΧ. ? Feyel, τῶ ἰμιμναιήω ΙΠΧ Vatin. **B.23** τῶν μιόνων τᾶς μν(ᾶς) . . ? Feyel, τῶν μιόνων Ι τᾶς μνᾶς Vatin. **B.24** Λαβρίχω τῶ μναϊῆω ΙΧ . ? Feyel, Λαβρίχω τῶ μναιήω [Vatin. **B.25** μν(ᾶς) Feyel. **B.27** Που(ρ)ρίδων (i.e., Που⟨ρ⟩ρίδων, lapis Κ) τᾶς μν(ᾶς) Feyel. **B.29** ΚΛ..ΕΙ - - - - - - - - Feyel, Βαλλερ [ ] Vatin. **B.30** ΧΛ . ακος - - - - - - - - Π - - - - - - - - Feyel, Χακακος πουρα[μ]ω Π Vatin. **B.31** Ἐγχέλιο - - - - - - - - - - - Feyel, Ἐγχέλιουος μέδδο[νος] Vatin. **B.32** .ΛΣΙΓ . .ΝΙΠ. . ? Feyel, τᾶς μίον[ος] ΙΠΧ Vatin. **B.33** ΤΑΣΤΕ. .Α. .ΛΣΙ Feyel, Γαστριμάργας [ ] Vatin. **B.34** ΠΛΑΤΙΝΙ. . . Feyel (i.e., two missing letters followed by an apex). **B.35** ΤΑΝΕΞΕΝΤ Feyel. **B.36** μνᾶν ΗΤΛ Feyel. **B.37** ΝΩΝΠΧ *vac* Feyel. **B.38** τὰν δὲ ΔΑΓ Feyel. **B.39** ΝΕΙΣΣΜ.ΝΙ Feyel. **B.40** ΩΛΙΝΩΤ. . . . Feyel. **B.41** - - - - - - Π ?) - - - - - - Feyel.

Translation

"During the archonship of Aristokles, the agonarchs Aminias son of Dionysios, Dikaios son of Dionysios, and Hiarokleis son of Enchormas inscribed the things decreed concerning the produce of the sea. Let those selling seafood sell with certified weights: cuckoo wrasse for [.]XX chalks; bonito for [.]XX chalks; . . ."

A complete translation is prevented by the text's poor state of preservation, and would also involve the vexed problem of identifying ancient Greek fish names with species known to modern science. It is not my intention to deal with that problem here, although it will be obvious from the following discussion that Vatin's commentary is unreliable.[11] Details aside, the nature of the list is clear: the prescript is followed by the names of perhaps 65 to 70 saltwater fish and their prices, as well as a much shorter list containing

11. Vatin (1971) fails even to make use of Thompson 1947, which could itself be significantly improved, as noted already by Georgacas (1978, p. 75). The first species in the list, ἀλφεστής, offers an interesting example. It is clearly in the wrasse family *(Labridae),* but it is difficult to assign secure modern equivalents to the many Greek terms for wrasses, a problem complicated by competing descriptions and a host of synonyms in the early modern scientific literature. Vatin identifies this fish as *Labrus cinaedus,* an obsolete designation by Lacépède ultimately derived, like the

the names of at least six freshwater fish and their prices, introduced under a separate heading in line B.20. All names are in the genitive and prices are apparently quoted per mina's weight.

Most species would have been sold whole, but in the case of larger varieties, distinctions are sometimes made for various cuts, as, for example, in the entry for bluefin tuna (lines B.4–6): Θουννοκείτ[ω τῶ] | οὐπο[γ]αστρίω IIXX | τῶ ἄλλω I[.]X ("bluefin, for the belly meat, two obols, two chalks [per mina], for the rest one obol, [.]X chalks [per mina]").[12] The list also sometimes specifies different prices for larger or smaller specimens of the same species, as in lines B.17–19: Κεστρεῖος τῶ μέδ⟨δ⟩ονος | εἰμι[μ]ναιήω | τῶ | μίονος HΠX ("gray mullet larger than a half-mina, one obol [per mina], smaller than a half-mina, 11 chalks [per mina]"); similarly, lines B.21–23: Βαράκω τῶ μναιήω [price] | τῶ ἰμιμναιήω HΠX | τῶν μιόνων τᾶς μ[ᾶς] [price] ("*barakos* of a mina's weight [price], of a half-mina's weight 11 chalks, for a mina of those smaller [than a half-mina], [price] chalks").

A final, curious feature of the list is the fact that three of the names (lines A.i.14, A.i.18, and A.ii.21) are accompanied by the adjective κοθαρός, which also occurs in the prescript (σταθμῦ[ς] κο[θ]αροῖς, line A.i.7), apparently to denote "certified" weights. Vatin suggests that in the list the word means "authentique" and is intended to distinguish certain fish from similar subspecies of a lesser value.[13] This explanation has been rejected by a number of scholars and various alternative interpretations have been proposed.[14] Context strongly suggests, however, that Vatin's explanation is essentially correct and that the word is used in a similar sense both in the prescript and in the list. At its first occurrence in the list, the text is too fragmentary to offer any help.[15] The other two entries, however, for

Labrus cynaedus of Linnaeus, from descriptions in Latin literature of a fish called *cinaedus*. Thompson (1947, pp. 10–11, s.v. ἀλφεστής) gives Linnaeus's designation and proposes a number of other identifications as well, but the correct species is probably one not mentioned by Thompson at all. The assumption, based on its inclusion in the present list, that the fish had some commercial value, together with other evidence, including a statement by Apollodoros of Athens (*apud* Athen. 281e; *FGrH* 244 F214) that ἀλφεσταί are on the whole orange but show patches of purple (τὸ μὲν ὅλον κιρροειδεῖς, πορφυρίζοντες δὲ κατά τινα μέρη), suggest that it is best identified with the cuckoo wrasse *(Labrus mixtus)*. For more information on this species and those mentioned below, see *FishBase*, an online database with over 1,500 collaborators and detailed entries for more than 30,000 species.

12. θουννόκειτος can only refer to the bluefin *(Thunnus thynnus)*. Unlike the blood-red flesh of the rest of the bluefin, the belly meat is white due to the high fat content. In the 19th century it was canned separately in Sicily and sold under a distinct label as *ventresca*. In Japan, where it is called *toro* and served raw, the belly meat is the most prized cut from a fish that can sell for astronomical sums (on January 5, 2001, the Associated Press reported the sale of a 444-pound bluefin in Tokyo's Tsukiji fish market for a record $173,600). That the ancient Greeks shared a similar passion for bluefin belly meat is proved not only by the anomalously high price recorded here but by the quotations in Athenaios (7.302d–e and 357a) from authors praising this particular cut.

13. Vatin 1971, p. 102, an explanation approved by J. Robert and L. Robert (*BullÉp* 1972, 196).

14. See most recently Collin-Bouffier 2008, pp. 101–102, n. 46. Roesch suggests that in the prescript the adjective means "honest, accurate, verified" (1974, p. 8), but that it has an entirely different sense when used in the list of fish, where he notes that the term is applied only to larger species and suggests that it means "cleaned" or "gutted," as it sometimes does in modern Greek (1974, p. 7, n. 14). In fact, καθαρός is not attested in this sense in ancient Greek and, given the many large species that would have been sold in cuts but are unaccompanied in the text by any such qualification, it is hard to see why the adjective should be added only to these three entries. Sosin (2004, p. 193, n. 2), pointing out that weights and scales in fish markets might easily become encrusted, suggests that the law stipulates "clean weights" in order "to prevent artificially inflated weights and prices." The adjective καθαρός does indeed commonly mean "clean," but heavier weights would not disadvantage the buyer and the question of why the adjective is used only with certain species remains.

15. Vatin (1971, p. 104) identifies the fish in line A.i.14 (Αλακ[. . . .]ω κοθαρῶ [.]) with "ἠλακατῆν, qui est un gros poisson de la familie du thon," but as Thompson observes (1947, p. 75, s.v. ἠλακατῆνες), it is impossible to hazard an identification.

βατίς, skate (line A.i.18), and ῥίνη, angel shark (line A.ii.21), are telling, for there is comparative evidence to indicate that skate and angel shark were sometimes deliberately confused by fishmongers attempting to pass off one as the other.[16] Occasionally too the list may have attempted to distinguish between species commonly referred to by the same name.[17]

THE NATURE OF THE DOCUMENT AND ITS ARRANGEMENT ON THE STONES

A list of names of sea fish, grouped alphabetically by initial letter and accompanied by prices, begins in the left column of block A at line 8, continuing down the left column and onto block B, which contains a single column of equal width aligned with the left column of A. The alphabetical list of marine species is interrupted at line B.20 by a nonalphabetical list of freshwater species; the list of sea fish then resumes at the top of the right column of block A.

This arrangement is, in Vatin's assessment, "curiously chaotic."[18] He attempts to explain it by proposing that the stonecutter simply appended the list of freshwater fish to the bottom of block B, perhaps at a later date. The original decree, he argues, was federal and concerned solely with the produce of the sea, and he supports this interpretation by identifying the archon Aristokles, named in line A.1, with a known archon of the Boiotian League during the period from 224 to 210 B.C.[19] The appended list of freshwater fish, he concludes, was a local addendum, necessitated by Akraiphia's proximity to Lake Kopaïs.

As Roesch notes, however, there is little reason to identify the Aristokles named in this inscription with the federal archon known from other sources. There is no reference in the prescript to the Boiotian *koinon,* nor

16. Angel shark *(Squatina squatina)* is, as Thompson notes (1947, p. 221), "the most skate-like of the Sharks." Alan Davidson (2002, p. 35) observes that it is customary in Mediterranean fish markets to find only the "wings" of skate offered for sale, and Devedjian (1926, p. 165) notes that in the Istanbul fish market in the early 20th century, it was not uncommon for fishmongers to try to pass off the "wings" of angel shark as skate. A good analogy is afforded by the different varieties of dogfish. Faber (1883, p. 143) reports that in Adriatic markets the meat of the spiny dogfish was considered much superior to the others and the lesser varieties were often sold in their stead with the skin stripped off to deceive buyers. Dogfish are often sold in the same manner in modern Greek fish markets, and it is precisely this practice that is attacked in a fragment of Archippos (23 K-A; Athen. 227a): Αἰγύπτιος μιαρώτατος τῶν ἰχθύων κάπηλος, / Ἑρμαιος, ὃς βίαι δέρων ῥίνας γαλεούς τε πωλεῖ / καὶ τοὺς λάβρακας ἐντερεύων, ὡς λέγουσιν ἡμῖν ("The most shameless fishmonger is the Egyptian Hermaios, who strips the skin off of his angel shark and dogfish, and guts his sea bass, so they say"). A different interpretation of the passage is proposed by Collin-Bouffier (2008, p. 98), who argues that Archippos is feigning horror at a necessary practice intended to prevent spoiling.

17. In the entry for skate, where Vatin indicates a lacuna in line A.i.18, it is likely that none exists: the following lines, which would otherwise be alphabetically out of order, should belong to the same entry. If so, then the subheadings Ἀβοράτω ΠΧΧ and Βοράτ[- - -] may distinguish either between those sold whole and those sold with the "wings" removed, or, perhaps more likely, between two distinct types. In modern Mediterranean fish markets the flesh of the thornback is often considered superior to similar species (Davidson 2002, p. 35). Cf. *LSJ,* rev. suppl., s.v. ἀβόρατος: "(perh. = ἀϝόρατος = ἀόρατος), kind of fish."

18. Vatin 1971, pp. 97–98.

19. On the archon Aristokles, see Feyel 1942a, p. 44. Vatin (1971, p. 102) nevertheless recognizes that the ἀγώναρχυ (line A.1) seem to have been common civic officials in Boiotia, equivalent to the *agoranomoi* found elsewhere in the Greek world, a view at least as old as Keramopoullos's publication of inscribed lists of officials from Thespiai (1931–1932, p. 28). The evidence is discussed by Roesch (1965, pp. 141–145). In this article I refer to the Akraiphian ἀγώναρχυ simply as *agoranomoi.*

any other indication consistent with a federal decree. Aristokles is therefore more likely to be a local archon, as suggested already by Jeanne and Louis Robert, and again by Roland Étienne and Denis Knoepfler.[20] Indeed, the Ἰαροκλεῖς Ἐγχόρμαο named in line A.3 as one of the three ἀγώναρχυ, or local Akraiphian *agoranomoi,* is probably the same Hiarokleis son of Enchormas mentioned as an Akraiphian polemarch in an inscription that should date to ca. 210–203 B.C.[21] Even if the two men are not one and the same, we can be confident that the present inscription is not a federal decree by the Boiotian League but a civic document produced by the polis of Akraiphia.[22] The implications of this have not been fully appreciated. If the decree is civic, then it stands to reason that it was locally drafted, and its curious arrangement is impossible to explain as a consequence of a local list having been appended to a federal one.[23]

After reexamining block B and visiting the site of Akraiphia, I am led to conclusions very different from Vatin's. First, there is good reason to believe that the entire inscription was executed by a single stonecutter in a single operation. The lettering of the two lists is indistinguishable, and the smoothly dressed margin to the left of the text on block B appears to correspond exactly to a similar margin visible in photographs of block A.

Along the left edge of block B, however, is a curious feature that appears to be lacking on block A: a ridge of hammer-dressed stone that stands markedly higher than the inscribed area (Fig. 1; the left side of the block is at the bottom). Feyel believed that this ridge would originally have been covered by another stone in some kind of construction.[24] A visit to the site of Akraiphia suggests a different explanation, however: that the stonecutter fashioned a panel for the inscription in an already existing wall. The ridge of roughly dressed stone along the side of block B suggests that it once formed part of a quarry-faced wall.[25] The remains of such walls, characterized by blocks with level joints at the top and bottom but oblique and even irregular joints at the sides, are still visible around Akraiphia today (Fig. 2).[26] Block B shows surfaces consistent with its use in such a construction, being

20. J. Robert and L. Robert, *BullÉp* 1972, 196; Roesch 1974, p. 6; Étienne and Knoepfler 1976, p. 302, n. 133. These discussions are occasionally overlooked (e.g., in Schaps 1987).

21. Perdrizet 1899, pp. 200–201, no. 8, lines 2–3: Ἰαροκλεῖος Ἐγχόρμαο. A different Hiarokleis appears in a list of Akraiphian ephebes that the editors suggest should be dated after the middle of the 3rd century B.C. (*IG* VII 2716, lines 16–17: Ἰαροκλεῖς Χαρμ[ίδαο). A second Akraiphian Enchormas is attested in a list of recruits from the early 2nd century B.C. (Perdrizet 1899, pp. 195–196, no. 3, line 12: Ἐγχόρμας Ἀμφικρίτω). The name Enchormas is extremely rare: see Bechtel 1917, pp. 149, 352.

22. The inscription is obviously not an exact copy of a formal decree, but the regulations and prices inscribed by the Akraiphian *agoranomoi* may have been voted on by the assembly, as suggested by the phrase τὰ δεδο[γμένα], on which see Migeotte 1997, p. 49, n. 37; Bresson 2000a, p. 174, n. 103.

23. Roesch (1974, p. 7) nevertheless follows Vatin's suggestion that the freshwater list was appended, perhaps at a later date, and that the original decree would have been concerned only with saltwater species.

24. Feyel 1936, p. 27.

25. This explanation I owe in part to discussions with Phil Sapirstein, who recognized block B as having belonged to a quarry-faced wall based solely on my photographs of the stone.

26. Figure 2 shows the inner face of the acropolis fortification wall atop the hill known as Kriaria, immediately south of the modern village. The gate visible at the lower right enters a fortified outwork explored in two brief excavations in 1965 (Garlan 1974). Parts of the wall climbing the northern slope of the acropolis are ashlar and pseudo-isodomic, becoming trapezoidal and irregular on the summit and continuing to the southwest. The walls range in thickness from 2.7 to 3.0 m. Evidence of two distinct phases has been detected, with the regularly coursed sections perhaps constituting Hellenistic repairs to an original construction of the 4th century B.C. On the walls and their dating, see Garlan 1974, esp. pp. 106–112.

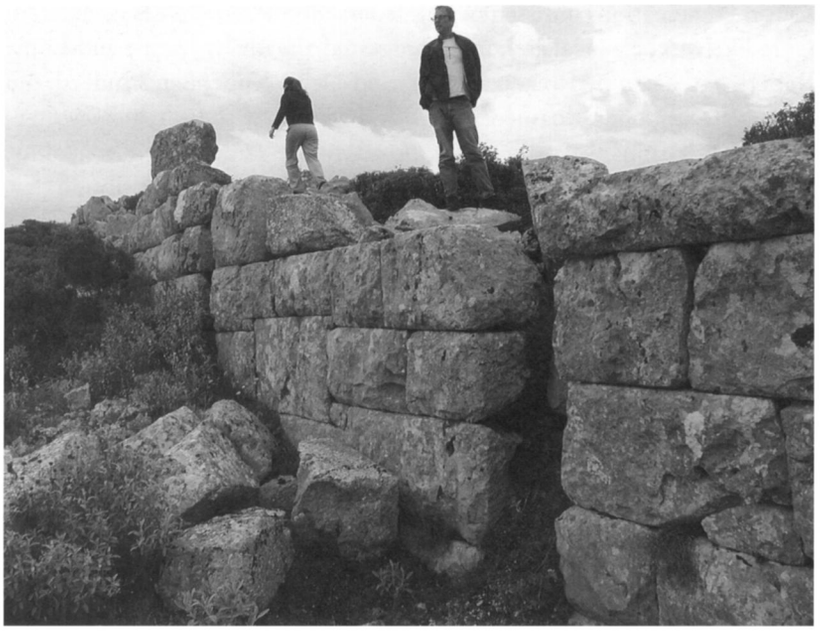

Figure 2. Fortification wall on the acropolis of Akraiphia

carefully dressed with a point above and below but not on its sides. The published photographs of block A show only the front of the stone, but Vatin's measurements suggest that it was a kind of plaque set directly into the face of the wall. When inserting block A into the wall, the stonecutter was careful to cut a contiguous, approximately symmetrical panel in block B, directly below, in order to hold a single column of text aligned with the left column of block A.

There were perhaps originally 42 lines of text on each block.[27] Vatin prints the first 33 lines of block B, but eight additional lines (B.34–41) appear on the stone (Fig. 3). These were recorded by Feyel but omitted by Vatin without explanation. The text of *SEG* XXXII 450 follows Vatin and subsequent scholars appear not to have noticed the absence of the final lines. Given that many letters in these lines are clearly legible, one can only assume that Vatin omitted them because he believed that they belonged to a separate document. In this he may have followed Feyel, who suggested in his commentary that the lines constitute the beginning of a second text, one that would have continued on an additional stone and was apparently concerned with the prices of other commodities.[28] For Feyel, who knew nothing of block A and its prescript, the nature and arrangement of the lists remained a mystery. The only reasons he cites for suspecting the beginning of a new text at this point are the size of the lettering and the fact that he was unable to read any additional fish names.

The letters in these eight lines are indeed considerably larger than those in the preceding lines (H. ca. 0.016 vs. ca. 0.011 m). Still, the lettering of the inscription is irregular overall. As Feyel had already observed, the letters in the heading ΛIMNHΩN, which introduces the list of freshwater species in line B.20, are also oversized and show the same increased spacing (Fig. 4). The initial lines on block A are apparently oversized as well.[29] Size and spacing aside, however, the style of the lettering in lines B.34–41 is to my eye indistinguishable from that of the preceding lines (Fig. 5).[30] These lines

27. In the text printed above, block B has only 41 lines. Feyel (1936, p. 28), however, reported traces of another line above the first numbered line in his edition. The surface of the stone at this point is worn nearly smooth and I could not make out any traces of lettering, but the space would permit an additional line.

28. Feyel 1936, pp. 31, 34.

29. Vatin (1971, p. 95) notes that the letters on block A are "plus hautes et plus larges dans la partie supérieure," and gives a range of 0.010–0.014 m for letter height.

30. Among the distinctive features that appear in both groups of lines are Π with an abbreviated right hasta, Ω suspended above the line, and identical serifs, especially pronounced in Σ, E, and Ω.

Figure 3. Block B, detail of lines B.34–41

Figure 4. Block B, detail of lines B.19–29

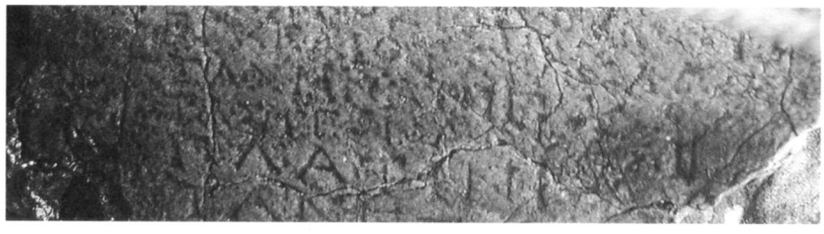

Figure 5. Block B, detail of lines B.30–35

follow immediately after line 33, separated by no additional space, and they observe the same left margin. The larger lettering requires no explanation more complicated than an attempt to fill the remaining space in the panel, for which there are analogies in inscribed lists of Boiotian ephebes.[31]

The content of the lines likewise suggests that they are part of the same document. The first four lines (B.34–37) include what appear to be prices per mina, and the natural assumption is that these too are prices for fish. The first cluster of letters, ΠΛΑΤΙΝΙ, which is clearly visible on the stone, is not part of any known Greek word. Given that the preceding lines contain the names of freshwater fish, however, and that many of those names are likewise unattested, the letters can reasonably be interpreted as yet another fish name in the genitive, with the final iota suggesting either a genitive plural in -ίδων (an ending that appears frequently in the lists: cf. A.ii.22, B.3, B.7, B.10, and B.27) or one of the many diminutives attested as fish names (-ιον, -ίδιον, -ίσκος, etc.).[32]

Although no known ancient fish name begins with the letters πλατινι, the names πλάταξ and πλατίστακος are both attested. The first seems to have referred specifically to a freshwater species.[33] It is known only from Egypt, but in my view it is likely that the name, like many other Greek names applied to Nile fish, originally denoted a native Greek fish, and was only later transferred to an Egyptian species.[34] The name πλατίστακος is

31. E.g., *SEG* XXXVII 385 (Thespiai, ca. 245–240 B.C.).

32. Most of the names of freshwater fish recorded in these lines are unattested. Βάρακος (Βαράκω, line B.21) finds a parallel only in Hesychios (βάραχος· ἰχθῦς ποιός). The name λάβριχος (Λαβρίχω, line B.24) cannot correspond directly, as Thompson (1938) suggested, to the λάβραξ (European sea bass, *Dicentrarchus labrax*), which appears on block A (unknown to Thompson) in the list of saltwater species (λάβρακος, line A.ii.10). Thompson thought that βαράκω in line B.21 was to be taken together with λιμνήων in the preceding line as a single alphabetic entry for "the freshwater *barakos,*" followed by another saltwater species, the λαβρίχω in line B.24. This error is perpetuated, along with others, in Thompson 1947, p. 140, s.v. λάβραξ. In insisting on Thompson's identification, Rose (2000, p. 518) is probably mistaken. The suffix -ιχος is diminutive, as Strömberg notes (1943, p. 35; for the many Greek fish names with diminutive suffixes, see his index, pp. 147–153), and the name refers instead to a freshwater fish similar either in appearance or habit to the sea bass. Stephanides (1943, p. 202) reported that a freshwater fish that he identified as barbel *(Barbus barbus)* was called in Thessaly λαυράκι or ποταμολαύρακο. The forms Πουκρίδων (line B.27) and Χα̣κακος πουρα̣[μ]ῳ (line B.30) also correspond to no attested fish names. In line B.29, where I read Βα̣λλεκ̣[- - - -], Vatin's Βαλλερ [ ] finds a precise parallel only in variant manuscript readings at Arist., *Hist. An.* 568b26 and 602b26. Even the common eel appears here in a unique dialect form (Ἐγχέλιου̣ος, line B.31). Finally, Vatin's reading of Γαστριμάργας in line B.33, while derived from a fairly common adjective and followed by *LSJ*, rev. suppl., s.v. γαστρίμαργα, appears nowhere else as a fish name. This line, which Feyel read as ΤΑ̣ΣΤΕ̣. .Α̣. .ΛΣΙ̣ and I read as ΤΑΣΤΕΘΝΑ[. .]ΑΣ[- - -], is perhaps not a separate fish name at all but a descriptor belonging to the entry for eels that begins in line B.31. The names for saltwater fish are, by comparison, well attested. I return to this difference below (p. 272).

33. The name πλάταξ is attested at Alexandria for a Nile fish also called κορακῖνος (Athen. 7.309a). Perhaps relevant too is πλατακίον, which occurs three times in a short account of foodstuffs from Oxyrhynchus (*P.Oxy.* VI 920, lines 3, 7, and 10, 2nd–3rd century A.D.), and which the editors interpret as a diminutive of πλάταξ.

34. Thompson (1947, pp. 123–125, s.v. κορακῖνος) finds "fanciful" the Alexandrian etymology for πλάταξ, which assumes a derivation from πλατύς, and he suggests the possibility of an underlying Egyptian word. As noted by Robert (1963, pp. 154–155), Froehner (1875, p. 29) suggests a likelier derivation in his discussion of a Lydian epitaph commemorating a certain Ἀπφὺς Δημητρίου Πλάταξ (Le Bas and Waddington 1870, no. 662), whom he identifies not, following Buckler, as an Egyptian slave "beloved" (ἀπφύς) by Demetrios and named for the Nile fish πλάταξ, but rather as "Apphys, son of Demetrios, (called) Platax," the latter being a nickname, "Clapper," derived from the verb πλαταγέω. Strömberg (1943, p. 75) independently proposed the same etymology for the name of the Nile fish. Chantraine (1977, p. 912, s.v. πλάταξ) follows Frisk (1970, p. 553) in dismissing this etymology on the grounds that there is no evidence that the κορακῖνος made a clapping noise. Still, the Greek name πλάταξ might have been attached to the Nile κορακῖνος for reasons unrelated to its original etymology.

attested as an alternative for πλάταξ, but was also used more widely to refer to a large variety of gray mullet.[35] Sources of the 19th and early 20th century report that a species of freshwater fish in the carp family *(Cyprinidae),* present in the lakes of Thessaly just north of Boiotia, was locally called πλατίτσα.[36] It would be rash to conclude that the modern name must be a direct survival of an ancient one, or that Πλατινι[- - - -] in the present inscription refers to the same fish.[37] Nevertheless, the possibility that it designates a species in the carp family suggests an interpretation of lines B.34–37, which are otherwise impossible to construe.

If Πλατινι[- - - -] is in fact the name of a fish, then the following lines (B.35–37) seem to record prices for a mina of that fish, with a different price for each of two subcategories. In the first case (B.35–36) the letters ΕΞΕΝΤ are perhaps part of an adjective ἐξεντ[ερ- -], with the meaning "gutted."[38] The second alternative (B.36–37) would then presumably refer to whole fish. The distinction between whole and gutted fish is made nowhere else

35. Athenaios (7.308f) reports that Parmenon of Rhodes used the term πλατίστακος to refer to the Nile fish known as κορακῖνος or πλάταξ, but he also (3.118c) attributes to Dorion the statement that the largest of the μύλλοι (gray mullet, on which see Thompson 1947, pp. 161–162, s.v.) were sometimes called πλατίστακοι as well. Overlooked by Strömberg, Thompson, Chantraine, Frisk, and others is a quotation in Diogenes Laertius's life of Plato (3.7) of three lines from a satirical poem by Timon of Phlious (fr. 30 Diels = *Suppl. Hell.* 804), in which Plato is punningly referred to as "the πλατίστακος who led them all" (τῶν πάντων δ' ἡγεῖτο πλατίστακος). This appears to be the earliest attestation of the word and editors generally agree that the sense is "the largest of the mullets." Both Frisk and Chantraine acknowledge a possible connection with πλάταξ/πλατάκιον, but neither can shed any light on the etymology of πλατίστακος. Both reject Strömberg's suggestion (1943, p. 32) that it is derived from an unattested irregular superlative of πλατύς (*πλάτιστος), which, in any case, would hardly explain the ending -ακος. The word was also used to refer to the female genitalia, at least according to a gloss preserved in Hesychios (πλατίστακος· (γυν)αικεῖον αἰδοῖον. καὶ ἰχθῦς ποιός) and Photios (πλατίστακος· τὸ γυναικεῖον αἰδοῖον). Strömberg (1943, p. 32) treats this as a metaphorical application of the fish name; Chantraine (1977, p. 912, s.v. πλάταξ) appears to agree and suggests that the name might have evoked πλατύς, although I suspect instead an allusion to the noteworthy fertility of the gray mullet. Perhaps relevant as well is πλᾶτις, used by Dikaiopolis in Ar. *Ach.* 132, apparently in the sense of "wife." (On the etymology of this word see Chantraine 1977, pp. 873–874, s.v. πέλας.)

36. Apostolides (1883, p. 30; 1907, p. 23) identifies the species as *Cyprinus kollarii* Heckel, by which he clearly means the Crucian carp (*Carassius carassius* Linnaeus), a species smaller than the common carp, but nevertheless commercially valuable, which flourishes in habitats ("shallow ponds, lakes rich in vegetation, and slow-moving rivers" [*FishBase,* s.v. *Carassius carassius*]) similar to those that probably characterized the ancient Lake Kopaïs. Stephanides (1943, pp. 203, 206), however, was unable to find Crucian carp in the lakes and rivers of Thessaly and Macedonia and thought that Apostolides had confused it with two other species in the same family, the roach *(Rutilus rutilus)* and the rudd *(Scardinius erythrophthalmus).* Among the local names recorded by Stephanides for these very similar species are πλατίτσα, πλατίκα, and καραπλατίτσα. The Crucian carp is now occasionally found in the lakes and streams of northern Greece, but while most scholars (e.g., Crivelli 1995) assume that it is a recent introduction, they do so "without any major information" (*FishBase,* s.v.). Economidis (1972–1973, pp. 469–470) notes that Apostolides' description seems to fit the Crucian carp better than either the roach or the rudd.

37. It has been suggested that the Greek πλατίτσα is borrowed directly from *plotica,* the Slavic name for the same or similar species (Miklosich 1869, p. 553; further bibliography in Georgacas 1982, pp. 310, 373). There is no evidence to prove otherwise, but the supposed Slavic origin of modern Greek nouns in -ΙΤΣ- remains a subject of much debate (see, e.g., Georgacas 1982).

38. Words beginning ἐξεντ- are virtually unattested in Greek. Dioskourides (2.62) describes a gutted salamander by means of a participle of the verb ἐξεντερίζομαι; in its only other appearance, also in Dioskourides (4.162), the verb describes the removal of pith from a plant. Archippos (fr. 23 K-A; Athen. 227a) uses the verb ἐντερεύω to describe a dishonest fishmonger who guts his sea bass (τοὺς λάβρακας ἐντερεύων). The adjective ἐξέντερος is attested in a single entry in the lexicon of Hesychios: χαλάδος· λιθώδης, ἐξέντερος. This is immediately preceded by a very similar entry: χαλάδες· τὰ ἔντερα, ἢ λιθώδεις. Both χαλάδος and χαλάδες are otherwise unattested, prompting Musurus to restore χολάδες ("guts") and to delete λιθώδεις, which he suggested might have been introduced here from an earlier entry for χέραδος ("rocky"). (For the text of Musurus I have had to rely on the *apparatus criticus* in Schmidt [1858–1868] 1965, vol. 4, p. 268.)

in the lists.[39] This is hardly surprising, however, given that smaller fish were normally sold whole, as indeed they are in Greek fish markets today. Larger fish were sold by the cut, occasionally with distinctions in price for the choicer parts (as in A.i.36–38 and B.4–7). If the restoration ἐξεντ[ερ- -] is correct, it suggests that one variety of fish regularly arrived at the market in two different conditions, an anomaly that may perhaps be provided by a modern parallel. Ταραμάς or κόκκινο χαβιάρι, the cured fish roe so common in Greek *mezes,* was traditionally made from the roe of freshwater species in the carp family.[40] If we assume that the Hellenistic inhabitants of Akraiphia made a similar product, then it is perhaps understandable why some fish would arrive whole and others gutted, the latter having already been stripped of their roe by fishermen or fish-farmers.

Since partially processed fish carry more meat per mina than those delivered whole, such an interpretation would explain the difference in price. I can, however, find no Greek word meaning "whole" that will fit the lacuna in lines B.36–37.[41] Perhaps the distinction was between a mina of those that had been gutted (females) and a mina of males, τὰ̣[ν ἀρσέ]ινων. A possible parallel appears in a nearly contemporaneous papyrus document from the Egyptian Fayoum, which records orders for the dispatch of large quantities of fish, distinguishing in certain instances between male (τὸν ἄρσενα) and female.[42] The distinction occurs only in shipments of κεστρεύς, a name that refers to one or more species of gray mullet, historically the most important commercial fish in Egypt, in part because its roe was used to make the cured delicacy botargo.[43] In ancient Greece cured-roe products

39. It is possible, however, that certain varieties of fish were processed in other ways (as in the case of skate, discussed above, nn. 16 and 17, of which only the "wings" may have been offered for sale).

40. Devedjian (1926, p. 219) reported that in the early 20th century, Turkish *tarama* was imported from across the Black Sea. It was extracted from *taranga* or *taran,* the roach *(Rutilus rutilus),* which could be captured in huge quantities in the rivers of southern Russia. A similar red roe is now taken from a number of other *Cyprinidae:* see especially Georgacas 1978, pp. 146–148.

41. As an alternative, one might suppress the first *nu* in line 37 and restore, by analogy with lines A.i.38 and A.ii.29, τὰν ἐξεντ[ερ- -] | μνᾶν Η τὰ̣[ν ἄλλ]ι̣{ν}ων ΠΧ ("a mina of gutted for six chalks, a mina of the others for five").

42. *P.Tebt.* III.1 701r2, lines 43–45 (235 B.C.): Ἀρχιτίμωι χαίρειν. πεπράκαμεν Θόλι τὸν κεστρέα | τὸν ἐν ταμιείωι τὸν ἀίτην καὶ ἄρσενα ἴσον πρὸς | ἴσον ἀν(ὰ) (ὀβολοὺς 5), τὸν δὲ ὑπερπίπτοντα ἄρσενα ἀν(ὰ) (ὀβολοὺς 4). ("To Architimos, greetings. We have sold to Tholis the κεστρεύς in the ταμιεῖον [perhaps "reservoir" rather than "storeroom"], with females and males equal for equal at five obols each, but the excess males at four obols each.")

43. See Thompson 1947, pp. 108–110, s.v. κεστρεύς. In his discussion of this document, Dumont (1977a) notes the identification of the fish, but does not attempt to explain the differences in sex and price. The editors of the papyrus acknowledge that the distinction between the sexes is "strange," as is the fact that the excess males are sold at a lower price, suggesting that "perhaps they were to be used for stocking purposes, or the roe may have been regarded as a delicacy" (*P.Tebt.* III.1, p. 59). That delicacy was botargo, of which Hughes and Wasson (1947, p. 415) offer a concise description: "Botargo is salted, dried, and sold in the original lobes—often preserved with a coating of beeswax—and is a compact, reddish-black, nutritious mass in which the original eggs have lost their identity." The production of botargo from gray mullet has a long history in Egypt (Edel 1961, pp. 211–218). Representations of the process dating to the Old Kingdom depict each step in its preparation, from the removal of the roe to its rinsing, pressing, and curing (Keimer 1938–1939; Vandier 1969, pp. 643–648). The distinctions in sex and value recorded in the papyrus are neatly illustrated by the etymology of μπάφα, a modern Greek word for the female of at least one species of gray mullet *(Mugil cephalus).* As Georgacas (1978, p. 173, n. 257) notes, this word is probably derived from Italian *paffa* ("plumpness") and explained by the fact that the mullet's ovaries, when ripe, might increase the weight of the fish by close to a third. Devedjian (1926, p. 196, n. 1) reports extracting a kilogram of roe from a single gray mullet weighing 3.5 kg. Unlike the fish that arrived gutted in the market at Akraiphia, those referred to in the papyrus may have been delivered alive: Devedjian (1926, pp. 194–195), in describing how Turkish fishermen traditionally prepared botargo, notes that the roe extracted from live fish required less preparation and was considerably more prized.

are rarely attested as items of long-distance trade.[44] Nevertheless, it is certain that the Greeks knew of such products, and they were no doubt widely produced and consumed at the local level.[45] Evidence for their production and consumption in Hellenistic Boiotia may well be hidden in lines B.34–37, which might be speculatively restored as Πλατινι[δων?] | τὰν ἐξεντ[έρων] | μνᾶν Η τὰ̣[ν ἀρσέ]ιν̣ων ΠΧ ("For carp(?), a mina of gutt[ed] for six chalks, a mina of [males] for five").

The final four lines of the inscription are even more problematic. Although τὰν δέ at the beginning of line B.38 makes it unlikely that these lines belong to a different decree, the particle δέ is found nowhere else in the lists and its appearance here seems to introduce a new clause. With the reading δαπ̣[- - -] for Feyel's ΔΑΓ at the end of the line, a restoration suggests itself: τὰν δὲ δαπ̣[άνα]ιν̣ εἰς . . ., part of a common formula specifying the party who is to pay for the publication of the text.[46] It is difficult, however, to see how such a clause can be restored using the surviving letters.[47] Instead, the final clause may have been concerned with some other regulation of sales in the fish market.

In conclusion, then, it seems likely that the entire inscription, including the final eight lines, was cut by a single stonecutter in a single operation. The necessity of cutting a somewhat asymmetrical panel in the face of an existing wall is all that is required to explain the "curiously chaotic"

44. Thompson (1947, p. 112) thought it "curious" that he could find only a single ancient allusion to caviar or botargo. That allusion, a reference in Athenaios to τὰ τῶν ἰχθύων καὶ τῶν ταρίχων ᾠὰ (3.121c), while clearly acknowledging that roe products could be made from a host of other fish, probably masks a discussion of botargo manufactured specifically from gray mullet. The passage as a whole appears to rely on the dietetic author Diphilos of Siphnos, with the reference to roe following directly on a comparison between the salted flesh of the Nile fish κορακῖνος and that of the μύλλος, another name for gray mullet. The importance of the cured roe of the latter may have prompted the discussion of roe in Diphilos. The word botargo itself probably derives from ᾠὸ τάριχον and related terms in later Greek (Hughes and Wasson 1947; Georgacas 1978, pp. 167–187). Caviar, in which the roe is salted after being removed from its membranes, was also probably known to the Greeks (Thompson 1947, p. 17; Robert 1962, p. 59), although when compared to other secondary products such as fish sauces or *garum* the lack of explicit evidence is curious. There is, for example, no price for cured roe in Diocletian's Price Edict, although *garum* appears with a price of 16 *denarii* per *sextarium* (3.6; Lauffer 1971, p. 103). Nevertheless, Byzantine sources prove that by the 9th century, the caviar of sturgeon was considered a delicacy, and it may have been exploited and traded at least on a limited scale already in antiquity. One of the ancient names for sturgeon, ἀνταικαῖος, seems to have come to designate the secondary products of the same fish, which may indicate that its caviar was traded even as far as Egypt, where the term appears in Ptolemaic papyri (*P.Cair.Zen.* I 59121, lines 2 and 8 [256 B.C.]; IV 59681r, line 9 and 59682r, line 6 [3rd century B.C.]; *P.London* VII 2141, line 11 [3rd century B.C.]; *PSI* V 535, line 35 [3rd century B.C.]).

45. Recent comparative evidence suggests that in most regions of mainland Greece cured roe could have been produced in only relatively small quantities. Figures reported by Georgacas (1978, pp. 248–250) indicate that in the 1970s the whole of Greece produced only a few thousand pounds annually. Panagiotopoulos (1916), however, records that in the early 20th century, fishermen in the Messolonghi lagoon alone produced some 4,000 kg of botargo annually. In antiquity such a nutritionally valuable resource is unlikely to have been entirely despised.

46. The term most commonly used for the cost of inscribing a decree is ἀνάλωμα (e.g., *IG* II² 1264, lines 24–27 [300/299 B.C.]; *IG* XI 4 1039, lines 14–16 [3rd century B.C.]), but δαπάνη is also attested (e.g., *I.Mylasa* 636, line 5). Feyel (1936, p. 31) acknowledged this possibility in his commentary, but also suggested δαμ[ία]ιν̣ as a dialect form of ζημίαν, which would have introduced the terms of punishment for sellers found in violation of the decree. The traces visible on the stone, however, agree better with *pi* than with *mu,* for the very bottom of what appears to be the right hasta of the *pi* (which here descends only to the midpoint of the line) is clearly visible.

47. I can see no obvious way to construe the letter cluster ΝΕΙΣΣΜΑΝΙ̣, and the restoration τὰν δὲ δαπ̣[άνα]ιν̣ εἰς still leaves the enigmatic Σ̣ΜΑ̣Ν̣Ι̣[- - - -] unexplained. Furthermore, the language in the prescript (τὺ ἀγώναρχυ . . . ἐσταλοκόπεισαν τὰ δεδο[γμένα], lines A.1–3) might be taken to imply that it was the *agoranomoi* who were responsible for inscribing the decree.

arrangement of the text. The stonecutter was given a single document that began with a prescript, followed by a long list of marine fish arranged alphabetically, then a second, shorter list of freshwater fish, and finally, at the bottom, a clause concluding the decree. He attempted to preserve something of the arrangement of the original document by inscribing the decree's final clause at the bottom of block B. This arrangement necessarily entailed interrupting the list of saltwater fish. Given these requirements, his solution was the best available.

FISH LISTS AND TAX COLLECTION

An important question remains: why does the decree, drafted locally and intended to regulate prices in the local fish market, contain two distinct lists that are organized very differently? The authors of the decree evidently did not compile their lists by observing the fish available in the local market, where freshwater fish were sold side-by-side with marine species. Had they done so, there would have been no reason to separate salt from fresh, or to alphabetize the former and not the latter.

The arrangement of the text appears even more unusual when the Boiotian decree is compared with a roughly contemporary inscription from Delphi, which also consists of a list of fish names accompanied by prices.[48] The stone is badly damaged and difficult to read, but enough of the text is preserved to indicate that the fish are named in no particular order.[49] Furthermore, the Delphic inscription records different prices for larger and smaller fish of the same species, a distinction that seems to derive from the practical experience of fishmongers selling fish by weight in the local market: if it takes *x* number of a particular variety of fish to make up a mina, the price is *y,* but if it takes more than *x,* the price is *z* (where *z* will obviously be somewhat less than *y*). This system is markedly different from the weight distinctions found in the inscription from Akraiphia, where, for example, fish are sometimes specified as "larger than a half-mina" (lines B.17–18) or "smaller than a mina" (line B.23). The system employed at Delphi is only useful when selling fish a mina at a time, whereas that employed at Akraiphia would also be useful when selling fish in bulk, with the catch sorted both by species and by relative size.

The presence in the Akraiphian document of two distinct lists, very differently arranged, is curious, and I propose a simple explanation: the two lists had different sources. The alphabetized roster of saltwater species was copied from a preexisting list, while the freshwater species, which preserve no trace of an alphabetical sequence, were perhaps compiled from scratch for the purposes of this decree. Where then did the *agoranomoi* find the first list, why is it alphabetically arranged, and why does it include only marine species?

The list of saltwater fish, which originally included between 65 and 70 names, certainly does not represent every locally available species. Nevertheless, as a catalogue of commercially valuable varieties (in which similar species are often subsumed under a single name), it is unusually thorough and would represent the inventory of a remarkably well-stocked

48. Vatin 1966 [= *SEG* XXIII 326], dated by letter-forms to the 3rd century B.C.; discussed briefly by J. Robert and L. Robert in *BullÉp* 1967, 309. Unfortunately, I have not had the opportunity to examine this inscription. Given the doubts voiced about many of Vatin's readings in other inscriptions from Delphi (see, e.g., *BullÉp* 1994, 394), the text should perhaps be considered less than certain.

49. E.g., περ̣κ[ῶν] appears in line 5, ψόρων in line 13, and θυνίδω[ν] in line 15, with [ἐρ]υθρίνων a not unlikely restoration in line 14.

fish market. By comparison, a 19th-century survey of Adriatic fisheries, which relied on detailed data and distinguished carefully between related species, reported that in 1878 more than a hundred different species of seafood were brought to market in the northeastern Adriatic.[50] Considerably fewer species, of course, were available in the market of any given city over the course of a year: 38 in the village of Megline, for example, 54 in Ragusa and Lussinpiccolo, 55 in Zara, and 56 in Pola. Only the largest markets, such as those at Spalato, Trieste, and Rovigno, saw a variety of fish greater than or equal to the number recorded at Akraiphia (95, 78, and 70 species, respectively). Given that the list from Akraiphia probably includes some closely related species under a single common name, it is possible that the ancient fish markets of Boiotia may have been as diverse as the richest 19th-century Adriatic markets.

No such data are available for Greek fish markets of the late 19th or early 20th centuries. The first reasonably reliable catalogue of Greek fish, published by Nicolas Apostolides in 1883, is not limited to commercial or marine fish and is drawn from information gathered from different parts of the country.[51] A few years later, Horace Hoffman and David Starr Jordan produced a catalogue that relied in part on species collected in Athenian fish markets.[52] The list includes 216 species, not all of which are commercially viable or commonly considered edible. Hoffman's notes indicate that he was able to collect only 82 species, and it is not certain that all of these were found in Athenian fish markets; moreover, a number are primarily freshwater species, and modern Greek fish-market vernacular does not recognize all of them as distinct varieties.[53] Since some of the species Hoffman collected were unknown to Apostolides, it is safe to assume that Hoffman includes fish that would have appeared only rarely in the market.[54] Nevertheless, it remains possible that in the 1890s Athenian fish markets demonstrated a diversity comparable to that of the larger Adriatic markets.[55]

Given the anecdotal evidence preserved in Attic comedy, which is filled with references to a dizzying array of seafood, it would not be

50. Faber 1883, p. 141.

51. Apostolides 1883, pp. 5–35.

52. Hoffman and Jordan 1892.

53. It is unclear where Hoffman obtained some nonfood fish, such as the ἁλογάκι ("little sea horse") (Hoffman and Jordan 1892, pp. 249–250). His collection also included the common eel (pp. 244–245), which was no doubt available in Athenian markets but probably captured in fresh water, as it was at Akraiphia. *Gymnothorax unicolor* and *Muraena helena,* two similar species in the family *Muraenidae,* were, according to Hoffman (pp. 247–248), sold in the market under the same modern Greek name, σμέρνα. Both may have been sold at Akraiphia as Μοῦρος (line A.ii.12), although the sources suggest that in antiquity the species were sometimes distinguished (see Thompson 1947, pp. 162–166, s.v. μύραινα and μῦρος), and it is possible that we should read Σ̣μ̣υ̣ρήνας for Vatin's otherwise unattested Σ̣κ̣αρήνας in line A.ii.23. The same tendency to refer to different varieties of fish by a single name is seen in the treatment of closely related species of the family *Atherinidae* (Hoffman and Jordan 1892, pp. 252–253), all simply ἀθερίνα in 19th-century Greek, as well as many species of *Mugilidae* (pp. 250–252), *Sparidae* (pp. 261–268), and *Pleuronectidae* (pp. 277–278). Of the species *Pomatomus saltatrix,* Hoffman likewise notes (pp. 258, 271) that the fishmongers "probably did not distinguish it from *Lichia amia.*"

54. E.g., Hoffman and Jordan 1892, pp. 246, 248, 253, 257, 258, 261, 265, 274, 276. Given the state of ichthyology in the 19th century, it is almost certain that some of these identifications are in error.

55. The central fish market in Athens still offers a window into what J. Davidson, in the title of his 1997 study, called one of the "consuming passions" of the Athenians. Much of the local diversity has disappeared, however, and overfishing continues to take a toll. Newspaper accounts published in the wake of a Greenpeace study of the Greek trade in illegal and undersized fish note that even formerly abundant species are disappearing (in English see, e.g., *Kathimerini* [Athens], Sept. 16, 2005, p. 1; *Athens News,* Sept. 23, 2005, p. 3).

surprising to discover an inscribed list in the Athenian Agora that is similarly comprehensive.[56] That such a list survives not from a regional urban center like Athens but from a largely undistinguished town in Boiotia is, however, unexpected. If it can be taken as evidence of the ready availability of such a wide variety of seafood in Akraiphia, it would suggest, as Rostovtzeff recognized, that the ancient trade in fresh fish was far better organized and conducted on a larger scale than one might otherwise imagine.[57]

The origin and alphabetical arrangement of this list of saltwater fish remain to be addressed. There is no reason to believe that such a list could have been taken from a literary or encyclopedic text. Alphabetical catalogues of fish names do not appear in the literary record before the time of Augustus.[58] The list from Akraiphia bears little resemblance to any of these, and to argue for a literary origin would require positing the existence of a lost alphabetical glossary of fish names that excluded freshwater species and was compiled at a date well before the earliest surviving evidence for such a work. Other lists of fish certainly existed, in didactic or comic poetry and in scientific and medical works, but none of these are likely to have been arranged alphabetically. Instead, the arrangement would have been rooted in the daily practice of fishermen, who arranged species into broad classes (fish, crustaceans, mollusks), and then into smaller groups on the basis of the habitat in which they were captured. Such an arrangement is found already in the Hippocratic corpus and in Aristotle, and as late as the 2nd century A.D. it was still preferred by Oppian, who included in the first book of the *Halieutika* a lengthy catalogue of sea fish arranged by habitat: the sandy, muddy, and marshy shores, the rocky places, and the open sea.[59]

56. A generous collection of comic passages devoted to fish can be found in books 7 and 8 of Athenaios. The central ancient Athenian fish market may have been located near the Stoa Poikile on the northern side of the Agora (cf. Alkiphron 1.3). The Agora excavations have recently expanded in that area, raising the possibility that direct evidence for the market may eventually be discovered.

57. Rostovtzeff 1941, vol. 3, p. 1615, n. 128.

58. For a brief discussion of the evidence for such lists, see Richmond 1973, pp. 74–75. The earliest surviving example appears in a short treatise, Περὶ τῆς ἀπὸ τῶν ἐνύδρων τροφῆς, by an obscure medical writer, Xenokrates of Aphrodisias (Ideler [1841] 1965, pp. 122–133). Datable references in his work place Xenokrates no earlier than the late 1st century B.C., and perhaps somewhat later (Wellman 1907). His list of species is only partly alphabetical, but an alphabetically arranged list sharing many peculiar features with that of Xenokrates appears in Pliny, *HN* 32.145–151. Another alphabetical catalogue, augmented by literary citations, is found in Athenaios (7.282–330). Fish lists that appear in bilingual glossaries constitute a separate category. Such lists survive in a number of medieval manuscripts: see, e.g., Goetz 1892, pp. 16, 88, 186, 256, 317; Papendick 1926. Early predecessors of these glossaries are preserved in papyri: *P.Oxy.* XXXIII 2660 and 2666(a) (1st–2nd century A.D.); *SB* XIV 12137 (second half of the 2nd century A.D.).

59. The second book of the Hippocratic Περὶ Διαίτης, usually dated to the 5th century B.C. and often ascribed to Hippokrates' teacher, Herodikos of Selymbria, discusses the healthful properties of various foods, including seafood (2.58). The fish are clearly grouped by habitat: οἱ πετραῖοι, the rock-fish; οἱ πλανῆται, the "wandering," i.e., pelagic or open-water species; ὅσοι δ' ἐν τοῖσι πηλώδεσι καὶ ὑδρηλοῖσι χωρίοισι τὰς τροφὰς ἔχουσιν, the fish of muddy and marshy shores; and οἱ ποτάμιοι καὶ λιμναῖοι, the fish of rivers and lakes. Aristotle still finds room in his scientific investigations to group various fish by habitat (see, e.g., *Hist. An.* 7.598a), but the popular tradition is preserved most clearly in Oppian's *Halieutika.* Oppian's catalogue begins with the species that prefer sandy, muddy, and marshy shores (1.95–121), then lists those found in many varieties of rocky habitat (1.122–178), before turning finally to the pelagic species (οἱ δ' ἐν ἀμετρήτοισιν ἅλην πελάγεσσιν ἔχουσι, 1.179). Traces of these categories can be found in many other texts, including, e.g., the treatise by Xenokrates of Aphrodisias (see n. 58, above) and a fragment of Antiphanes (fr. 127 K-A; Athen. 7.303f) that ridicules a rustic for eating only the kind of seafood found close to shore.

All of these habitats are represented by the fish recorded in the inscription from Akraiphia, suggesting the existence of a well-developed fishing industry capable of exploiting a broad range of marine ecosystems. This conclusion is precisely the opposite of that drawn by Thomas Gallant, who in an influential study published in 1985 treated marine fishing in ancient Greece as no more than a risk-management strategy.[60] In Gallant's work, Rostovtzeff's portrait of fisheries as a vibrant and vital sector of the Greek economy is replaced by a minimalist view of a resource that, like other "wild gathered plants and animals," would have been exploited chiefly in response to periodic dearths, and "could only have played a marginal, supplementary role."[61] Gallant's fishermen are simply peasant farmers occasionally trying to scare up an extra bit of protein, without, it would appear, much success: "far too often the solitary fisherman with his reed pole would return home with an empty creel."[62]

Gallant cites the relative abundance of demersal versus pelagic species in the inscription from Akraiphia as evidence for his claim that ancient Mediterranean fisheries would have been largely shore-based and therefore extremely limited in scale.[63] In fact, however, the ratio of pelagic to demersal species listed in the inscription closely mirrors the ratios recorded for the 19th-century Adriatic region. In other words, the evidence of the inscription reflects ecological realities rather than ancient technological deficiencies.

A number of Gallant's specific claims about the technological limitations of ancient fishing are similarly unreliable, including the argument that nets were only employed in shore-based fisheries.[64] Aegean fishermen not only fished the reefs and beaches but ventured from shore in seaworthy boats, employing fixed and drifting nets, dragnets, and a bewildering array of specialized lines, hooks, and traps, and they did so not as a subsistence strategy or in response to periodic dearth but because with skill and toil they could earn a profit by selling their catch in increasingly monetized markets.[65] Here the evidence from the Hellenistic Aegean stands in stark contrast to comparative evidence from the peasant economy of Malay fishermen introduced by Gallant,[66] and to archaeological and

60. Gallant 1985; summarized in Gallant 1991, pp. 120–121.

61. Gallant 1991, p. 121.

62. Gallant 1991, p. 121. Ancient sources, however, agree with a number of modern ethnographic studies in suggesting a relatively clear distinction between farmers or part-time agricultural laborers and fisherman: see Mylona 2008, pp. 67–69.

63. Gallant 1985, p. 25.

64. Gallant 1985, pp. 24–25; for the weakness of that argument, see, e.g., Purcell 1995, p. 149, n. 12; Bekker-Nielsen 2002b.

65. The diversity of specialized equipment used by Greek fishermen is acknowledged in a Hellenistic epigram attributed to Leonidas of Tarentum (*Anth. Pal.* 6.4; Gow and Page 1965, p. 124, no. 52):

† Εὐκαμπὲς † ἄγκιστρον καὶ δούνακα δουλιχόεντα / χὠρμιὴν καὶ τὰς ἰχθυδόκους σπυρίδας / καὶ τοῦτον νηκτοῖσιν ἐπ' ἰχθύσι τεχνασθέντα / κύρτον, ἁλιπλάγκτων εὕρεμα δικτυβόλων, / τρηχύν τε τριόδοντα, Ποσειδαώνιον ἔγχος, / καὶ τοὺς ἐξ ἀκάτων διχθαδίους ἐρέτας / ὁ γριπεὺς Διόφαντος ἀνάκτορι θήκατο τέχνας, / ὡς θέμις, ἀρχαίας λείψανα τεχνοσύνας.

"Well-bent hook and long poles and line, and his fish-carrying baskets, and this trap devised against the swimming fish, the device of the seafaring net-fishermen, and his sharp harpoon, the spear of Poseidon, and the twin oars from his boats, these, the remains of a long practice, the fisherman Diophantos dedicates, as is fitting, to the lord of his craft."

See, e.g., *Anth. Pal.* 6.5, 6.23, 6.28, 6.90, and the similar funerary epigrams 7.295 and 7.305. On the relationship between trade, monetized markets, and ancient fishing economies, see Lytle, forthcoming, and pp. 295–296, below.

66. See Gallant 1985, p. 12 and passim; relying on Firth 1966; Fraser 1960, 1966.

ethnographic evidence for technologically more primitive fisheries in Peru and the Sahara.[67]

In my view, the importance of ancient Greek fishing communities and the advances in knowledge and technology that they produced tend to be under- rather than overestimated by most ancient historians. For example, while Bintliff's theory that the development of Aegean maritime culture had its roots in the "transmerance" of prehistoric Greek fishermen has been criticized, it remains the case that the close relationship between fishermen and the sea probably played an important role in the development and extension of Aegean trade.[68] This relationship is hinted at by the discovery in many ancient shipwrecks of fishing tackle through which the crews supplemented their diet.[69] It may be reflected even in the lists of fish from Akraiphia, where the contrast between the saltwater species, which are generally well attested, and the freshwater species, most of which are not otherwise known, could be a consequence of the greater mobility of marine fishermen.[70]

The wide variety of marine species recorded in the inscription from Akraiphia points to a well-developed fishing economy. The alphabetical arrangement of the list, however, is not derived from popular tradition nor from any known literary source. The most likely explanation for the arrangement had already occurred to Feyel, who, in his discussion of the purpose of the inscription, suggested two possibilities: that the numbers listed next to the fish represent either the maximum price to be paid or the tax to be assessed per mina for each species. He rejected the second

67. In Peru, at Cerro Azul, a site annexed in the 15th century by the pre-Incan kingdom of Huarco, a specialized economy seems to have developed at an early date, with fishermen catching and preserving large quantities of fish that were then carried to the interior by llama caravan. The richness of the region's fisheries allowed this early industry to develop without parallel advances in shipbuilding, which remained remarkably primitive. The strictly coastal nature of these fisheries is reflected in the fish bones from the site and in the grave goods of the fishermen, which typically consist of two different nets, both shore-based, but suitable for different habitats. Local coastal fishermen still employ the same nets and classify the available species by habitat, recognizing three types: *peña, costa,* and *playa* (rocky coast, sandy beach, and stony beach). See Marcus 1987a, 1987b; Marcus, Sommer, and Glew 1999. Like their counterparts at Cerro Azul, the nomadic fishermen of the western Sahara and the prehistoric Canary Islanders traditionally harvested fish and shellfish exclusively from the shore: see Serra Rafols 1957; Anthonioz 1967, 1968; Mercer 1976, pp. 174–177; 1980, pp. 120–121.

68. Bintliff 1977, pp. 117–122; criticized by, e.g., Efstratiou (1985, p. 7); Jameson, Runnels, and van Andel (1994, pp. 314–315); and Powell (1996, p. 54), although the latter acknowledges the likely historical relationship between fishing and trade.

69. Parker (1992, p. 29) reports the presence of fishing tackle in at least 29 ancient wrecks, and concludes that "fishing was obviously a normal activity on board." A similar conclusion is supported by an Archaic ivory plaque from the sanctuary of Artemis Orthia at Sparta, which depicts a crew member on a large sailing vessel hauling a fish over the stern (Dawkins 1929, pp. 214–215, pls. 109, 110). We now know that Mediterranean trading vessels often employed direct sailing routes from an early date (see, e.g., Ballard et al. 2002), and it is easy to imagine how their knowledge of inshore fishermen might have expanded to include pelagic species and their open-water habitats. Although its date is medieval, the fishing vessel ("Skerki A") found among the wrecks of cargo ships on the Skerki Banks between Sicily and Tunisia is suggestive; see Ballard et al. 2000, pp. 1596, 1598, fig. 4. The fact that in antiquity most fishing in the Aegean took place within a few miles of the coast, as indeed it still does today, is likely due as much to ecology as to technology: the Mediterranean is relatively barren below a depth of 250 m and the coastal shelves in the Aegean are relatively steep.

70. In an interesting discussion of ancient fish names, Mylona (2008, pp. 69–70) notes this gap in our evidence for freshwater species. The mobility of marine fishermen is also likely to have been a factor in the widespread use of saltwater fish names with origins that are, in Thompson's estimation (1947, p. 79), "non-Hellenic, like much else of the vocabulary of the Greek fishermen." (Cf. also the remarks in Thompson 1936, p. v.)

possibility, both because the sums seemed too high to be taxes and because there was no evidence that Akraiphia controlled a seaport in the late 3rd or early 2nd century B.C.[71] Of course, nothing prevented an inland city from imposing a local tax on imported fish, but the parallels suggest that such a tax is unlikely to have been assessed per species and per mina, which would have required officials to unpack, identify, and weigh the fish, and then to calculate the specific sum owed. Papyrus documents indicate that, in the Roman period at least, import duties of this sort were instead normally assessed as a flat rate per donkey- or camel-load.[72]

In a seaport, on the other hand, where fish arriving at the dock were sorted and weighed, there is no reason why a tax should not be assessed per mina for each species. Taxes on fish were indeed widely levied in Hellenistic ports.[73] Although it has been proposed that these taxes were assessed on retail sales,[74] that hypothesis is unlikely. A relevant fragment of Diphilos preserved by Athenaios (fr. 32 K-A, lines 1–4; Athen. 6.226e) has not received the attention it deserves:

> οὐ πώποτ' ἰχθῦς οἶδα τιμιωτέρους
> ἰδών. Πόσειδον, εἰ δεκάτην ἐλάμβανες
> αὐτῶν ἀπὸ τῆς τιμῆς ἑκάστης ἡμέρας,
> πολὺ τῶν θεῶν ἂν ἦσθα πλουσιώτατος.
>
> I have never seen fish more expensive. Poseidon, if you were collecting a tithe on fish from the price each day, you would be by far the richest of the gods.

The speaker in this passage could be proposing an entirely novel tithe, implying that Poseidon, or the city, currently collects no such tax. In my view, however, he is better understood as saying that an existing tithe should be assessed in a different fashion, based on the actual retail price of the fish (ἀπὸ τῆς τιμῆς ἑκάστης ἡμέρας). The passage takes for granted what the audience would already know: that tithes on fish in the Hellenistic period

71. Feyel 1936, p. 33.

72. *P.Wisc.* II 80 (A.D. 114) preserves a long list of duties assessed at a customhouse in Bacchias in the Fayum. Included are entries for fresh fish, assessed at the rate of two drachmas per donkey-load (5.151–152), and salted fish, assessed at seven drachmas and one obol per jar (5.169). While much of Lower Egypt was awash in fresh fish and locally produced salt-fish, many Greek inhabitants no doubt preferred the Aegean and Black Sea varieties, which arrived salted and could command relatively steep prices. A similar preference may be reflected in a bilingual customs tariff of A.D. 137 from Palmyra (*CIS* II.3 3913 = *OGIS* 629; see also Matthews 1984), which includes entries (preserved only in the Palmyrene version at lines IIa.34–38) specifying an import duty of 10 *denarii* per camel-load for salt-fish, and an export duty of three *denarii* per donkey-load. The difference can only partly be explained by the larger size of a camel-load (max. ca. 175 kg vs. ca. 75 kg for a donkey).

73. Hellenistic examples include an ἰχθύων δεκάτη together with a πεντηκοστή at Delos (*IG* XI 2 287, lines 9–10), and a δεκάτη ἰχθύων together with a duty on *murex* and other regular customs duties at Stalai in Crete (*Syll.*[3] 524, lines 7–8; see Chaniotis 1996, no. 64). In the late 4th century B.C., a 20% duty on fish is attested at Kolophon (Meritt 1935, pp. 372–377 + Wilhelm 1939, pp. 352–365, line 31: [τῆς πέ]μπτης τῶν ἰχθύων; the same duty is probably meant by τῆι πέμπτηι in 1ine 81; see Migeotte 1984, p. 285). Wilhelm (1939, pp. 361–363) suggests that a similar tax on fish underlies the 20% duty (τῶν πεμπτῶν) attested at Kalymna (*Syll.*[3] 953, line 61). A sacred law from Mykonos, roughly dated to the end of the 3rd century B.C., mentions sacrifices to be offered by the council "from the duty on fish" (*Syll.*[3] 1024, lines 10–11: ἀπὸ τοῦ τέλους τῶν ἰχθ[ύ]ων βουλὴ πριαμένη ἱερεῖα εἴκοσι | δραχμῶν διδότω).

74. See, e.g., Busolt 1920, pp. 607–608; Wilhelm 1939, pp. 361–363. Reger (1994, p. 256) suggests a tax on "the sale of fish" without specifying wholesale or retail; similarly Brun 1996, p. 136.

were not normally taxes on retail sales. Instead, they would have been collected long before the fish arrived on the fishmonger's table, and therefore must have been assessed based on values that had no direct relationship to the eventual retail prices.

It is possible, of course, that these taxes were only collected after the delivery and wholesale of the fish, although the available evidence for Hellenistic taxation offers no obvious parallels. Moreover, such a process would hardly require a detailed, alphabetical list of marine species with values per mina, nor would there be any reason to exclude freshwater species. In my view, the routine collection of Hellenistic customs duties offers a much better analogy. These duties were assessed *ad valorem* and collected before goods entered the market, or, in the case of exports, before they could be loaded on board a departing ship.[75] In a number of cases, tithes on fish (δεκάται ἰχθύων) are attested together with these customs duties, and lexicographers regularly equate the δεκάτη and those who collect it with customs duties and agents.[76] Pollux (9.30), for example, includes δεκάτη with ἐλλιμένιον, εἰκοστή, and πεντηκοστή in a list of terms for duties assessed in the harbor, and together with other terms for customhouses (τελώνια, πεντηκοστολόγια, φυλακτήρια), he offers δεκατηλόγια, δεκατευτήρια, and δεκατώνια.[77] I have recently argued that, in an inscription from Athens, Hadrian directly equates a tax on fish with revenues from import duties (εἰσαγώγια).[78] Indeed, it has even been suggested, not entirely without cause, that fresh fish was routinely subject to the Roman *portorium.*[79] Finally, an inscription of the 1st century A.D. from Ephesos records the construction on the harbor front of a τελώνιον τῆς ἰχθυϊκῆς, a designated customhouse for collecting just such a duty on fish.[80]

In the course of the routine collection of duties on seafood, officials could have made use of a list of fish with ascribed values per mina in order to calculate the declared value of the catch subject to duty. In a busy customhouse the alphabetization of such a list would offer obvious advantages. Lloyd Daly, in his study of the evidence for the early Greek use of alphabetization, highlights the close relationship in documentary papyri between alphabetization and tax collection.[81]

75. It cannot be proven, of course, that duties were always assessed *ad valorem,* although De Laet (1949, p. 47, n. 1) concludes that the Hellenistic period seems to have known hardly any other form.

76. For examples of such tithes, see above, n. 73. On the lexicographers, see Vélissaropoulos 1980, p. 212, n. 42.

77. Similarly, for names of customs agents, Pollux (9.29) offers δεκατηλόγοι and δεκατῶναι together with τελῶναι, ἐκλογεῖς, ἐλλιμενισταί, εἰκοστολόγοι, and πεντηκοστολόγοι. Demosthenes too (23.177) appears to equate δεκατηλόγοι with customs agents. It may be significant that Pollux found one of his terms for customhouse, δεκατώνια, in a comedy by Antiphanes called *The Catch* (Ἁλιευομένη) (fr. 28 K-A). Not surprisingly, one of the other two extant fragments of this comedy (fr. 27 K-A; Athen. 8.338e) is concerned with seafood, while the second (fr. 29 K-A) mentions a fishing line (ὁρμιάν).

78. *IG* II² 1103; see Lytle 2007a.

79. De Laet 1949, pp. 206–208. The evidence is difficult, however, and much of it would benefit from careful reconsideration. I have recently argued, based on epigraphic evidence from Delos and the *lex portus Asiae,* that Hellenistic duties on fresh *murex* were retained as import duties in the *portorium provinciae Asiae* (Lytle 2007b).

80. *I.Eph.* 20. The most thorough discussion is Horsley 1989, but the inscription and its social, legal, and economic context deserve further study. The funds for the customhouse were provided by a joint association of fishermen and fishmongers; similar associations of *piscatores et propolae* are attested at Ostia (*CIL* XIV 409 [*ILS* 6146]) and New Carthage (*CIL* II Suppl. 3929 [*ILS* 3624]).

81. Daly 1967, p. 45: "From these half-dozen documents it will be seen that from the second century before Christ, under the Ptolemies, and continuing on down into the period of Roman domination, the elaborate machinery of tax collecting and accounting in Egypt adopted and applied alphabetic

The absence of freshwater species from such a list is also easily explained as the result of a dichotomy in Greek customs practice between marine fisheries, which were generally of open access, and inland fisheries, which were often subject to special regulation. Plato appears to codify this principle in *Laws* 7.824b–c. A number of scholars believe that this passage is nothing more than a convenient philosophical construct, contradicted by quotidian practice according to which states and temples routinely laid claim to fishing rights at sea.[82] That view rests largely on misinterpreted evidence, however, the totality of which clearly indicates that Greek poleis generally laid no claim to marine fishing rights or otherwise attempted to restrict access.[83]

At the same time, while marine fishermen may have had free access to the sea, practicing their trade beyond the regulatory reach of the polis, their catches did not have free access to the market and were subject to special duties based on their value. Freshwater fish, on the other hand, would have been captured in lakes and streams or raised in ponds subject to property rights and special regulations. There is no reason to think they would have been subject to the same δεκάται ἰχθύων as marine catches, and they certainly would not have arrived at the market from the same harbors.

The best explanation for the peculiar arrangement of the inscription from Akraiphia is that local officials, in drafting a decree to establish reasonable maximum prices in the fish market, borrowed a specialized list used in the routine collection of taxes on seafood in a nearby port. They may have modified the prices and otherwise adapted the list for their specific purposes, but the basic structure of the original document survived.

This hypothesis suggests in turn a novel solution to a far larger problem. While much has been written about the scattered literary and epigraphic evidence for ancient Greek customs duties, no adequate explanation has yet been offered of the precise mechanisms by which customs agents valued dutiable goods in the Hellenistic period. Alain Bresson has recently argued that importers would have been required to declare intended sale prices and that these prices would have been used as the basis for customs valuations.[84] As he notes, this argument profoundly affects our reconstruction of the working of the *emporion,* and more specifically of the *deigma,* traditionally seen as an opportunity for intense negotiation over price between

arrangement as part of its system. There is no way of saying how much earlier than the second century the principle may have been adopted for this purpose." Daly briefly mentions the Akraiphian decree as among the earliest epigraphic evidence for alphabetization, noting merely that it seems to have served some administrative purpose (pp. 20–21).

82. See especially Dumont 1977b, relying in part on Höppener 1931, pp. 150–167, and subsequently endorsed in, e.g., Horsley 1989, p. 100; Schwarz 2001, p. 384.

83. I treat this subject at length in an article in preparation. Dumont (1977b, p. 55) and Bresson (2007, pp. 189–190) are likely in error, for example, in suggesting that Iasos's ownership of the "little sea" attested in a Hellenistic inscription (*Syll.*^{3} 307 = *I.Iasos* 30) implies general civic control over marine fishing rights. As suspected already by Dittenberger (*Syll.*^{3} 307, n. 5), the "little sea" was almost certainly a brackish lagoon, probably located in the modern plain southeast of Iasos near the mouth of the Sarichai River, where a marsh existed until very recently (see J. Robert and L. Robert, *BullÉp* 1973, 419; Heisserer 1980, p. 176). This explanation now seems to be widely accepted (see, e.g., *Barrington Atlas,* map 61). Similarly, Dumont (1977b, p. 56) points to the πορφύρα recorded in Delian temple accounts as a clear example of temples or states laying claim to marine fishing rights. I have recently argued, however, that the Delian πορφύρα was simply a duty on the delivery and sale of captured *murex,* analogous to other attested duties on fish and *murex* (Lytle 2007b).

84. Bresson 2008, pp. 99–109.

importers and buyers. In Bresson's view, by the time goods arrived in the *emporion,* there would be very little room for negotiation over price because importers would be constrained by their declared prices. He explains the literary evidence for such negotiation by suggesting that importers were only allowed to negotiate prices lower than their declared prices.

Bresson's reconstruction of the process seems extremely unlikely. The question is more appropriately treated elsewhere and in greater detail, but I note here that the epigraphic evidence is explicit about the fact that declarations were susceptible to audit when cargo was embarked or disembarked, at which point specific penalties might apply in the event that an importer or exporter had "undervalued" his cargo.[85] With one exception, discussed below, nowhere do these customs laws anticipate what would have been, if we follow Bresson's interpretation, the most pervasive form of fraud: declaring a sale price lower than the eventual, actual sale price. Nor is there any trace in the literary sources of this kind of fraud or the considerable bureaucratic machinery that would have been required to prevent it. Furthermore, exports were also subject to customs duties, and it is hard to believe that their valuations could have been based on an eventual sale price in some distant market.

Finally, goods were often subject to customs duties even when they were not intended for sale, and these goods must have been assessed by some other mechanism. The only evidence for importers declaring sale prices to customs agents is a Delian law governing firewood and charcoal, and it has been argued that this is better understood as an *ad hoc* solution to a specific problem, its very existence implying that the same mechanisms did not normally exist for other goods.[86]

Other reconstructions of the process of customs assessment are equally unconvincing.[87] I propose instead that customs officials in the Hellenistic

85. E.g., an inscription of the late 4th or 3rd century B.C. from Kyparissia (*Syll.*^{3} 952 = *IG* V 1 1421) specifies that importers are required to give a declaration to the customs agents and pay the duty when they offload their goods at the dock, before carrying them into the *emporion* or attempting to sell them. Similarly, exporters cannot load their ships until they have made a declaration, paid the tax, and summoned an agent to be present at the loading. Violators will pay 10 times the duty. Furthermore, if anyone is found to have undervalued his cargo (εἰ δέ τίς κα ὀλιγοτιμάσῃ), the customs agent can confiscate the goods left undeclared. A customs law from Kaunos (*SEG* XIV 639) and the *lex portus Asiae* (*SEG* XXXVIII 1180) agree in suggesting basically the same procedure in the 1st century A.D., with the latter careful to specify that when the importer unloads his ship the customs agents should check the actual goods against the declaration, counting the items assessed on a per article basis, such as slaves, and weighing those assessed by weight (lines 45–47). As Bresson notes (2008, p. 101), this process appears to be depicted in mosaics, reliefs, and frescoes at Ostia. To these should be added a Roman mosaic from Tunisia, which shows slaves unloading from a ship objects that appear to be metal ingots, perhaps lead, and carrying them to the shore, where two men in tunics weigh them on a large balance scale (Foucher 1960, p. 78, no. 57.169).

86. *I.Délos* 509. See, e.g., Stanley 1976, p. 293, for the view that this law is exceptional and that customs duties were not normally assessed on the basis of declared sale prices. Bresson (2008, pp. 108–109, 123–124) argues that the law, which was clearly intended to apply only to importers of firewood and charcoal, differed from normal practice chiefly in specifying that importers were not only prevented from raising their declared sale prices (which in Bresson's view was customary), but were also prohibited from lowering them.

87. Stanley (1976, pp. 291–292), for example, suggests that the value may have been based on a merchant's export receipt. As Bresson (2000b) demonstrates, the owners or captains of most ships offloading in Greek harbors would indeed have been able to produce certain forms of written documentation. Still, it is hard to believe that customs officials in one Greek city would rely on the documents produced in another Greek city to determine the value of a ship's cargo, especially when the prices of commodities could vary greatly from port to port. It is even harder to believe that upon arriving in Ionian ports, merchants transporting natron from Egypt, like those attested in the Aḥiqar scroll, had their cargoes assessed on the basis of Aramaic export receipts (for this customs record, see Porten and Yardeni 1993, C3.7; Yardeni 1994; Briant and

period routinely relied on detailed price lists similar to the one embedded in the Akraiphian decree in order to arrive at the "real value" of imported and exported cargoes assessed *ad valorem*.[88] Such lists may have been a regular feature of the νόμοι τελωνικοί that regulated customs collection in many Greek ports by the 4th century B.C., and perhaps even earlier.[89] Given that these lists would have been subject to periodic revision, there is no reason to expect that they would normally have been inscribed.[90] The list preserved in the inscription from Akraiphia, although it probably originated in a customhouse in a Boiotian harbor, survives only because it was borrowed and inscribed for a very different purpose.

AKRAIPHIA, ANTHEDON, AND THE ECONOMIES OF HELLENISTIC BOIOTIA

The port of Anthedon is the most likely source of seafood for Akraiphia.[91] As with many Boiotian city-states, the history of Anthedon is obscure and the site has received little attention from archaeologists. In the late 19th century the American School of Classical Studies at Athens conducted three weeks of excavations there, and the harbor was surveyed in

Descat 1998). Indeed, this solution ultimately begs the question, given that the export duties would themselves have required a valuation. Moreover, many goods, like the fisherman's catch, would have arrived in port unaccompanied by any documents to certify their value. What receipts could privateers have shown when they arrived in port with goods or slaves to unload? (The question is not merely theoretical: on the close relationships between piracy and more "legitimate" economic activities in the Hellenistic Aegean, see, e.g., Gabrielsen 2001.)

88. This hypothesis also suggests another solution to the much-debated problem of the meaning of the phrase καθεστηκυῖα τιμή in Athens. The phrase occurs in two 4th-century B.C. speeches ascribed to Demosthenes. In the first passage (56.8), concerning agents of the Egyptian grain monopoly stationed in various ports who have sent back letters reporting τὰς καθεστηκυίας τιμάς, it has been taken to mean "prevailing price." In the second passage (34.49), however, it appears to mean the "established or official price": when local grain prices rose to 16 drachmas per medimnos, Chrysippos earned the gratitude of the city by importing grain and selling it at τῆς καθεστηκυίας τιμῆς of five drachmas per medimnos. The phrase occurs again in a 3rd-century B.C. decree honoring the *strategos* Epichares (*SEG* XXIV 154, lines 17–19), and, following Reger (1993, p. 313, n. 45), a similar expression can perhaps be restored in two other inscriptions: *IG* II² 400, line 8 ([τῆς καθισταμ]ένης τιμ[ῆ]ς), and *IG* II² 499, lines 16–17 (τῆς κ̣[αθισταμένης τιμῆ]ς). Migeotte (1997) collects the evidence and summarizes the debate over the origin and meaning of the phrase. Bresson (2000c), suggesting analogies with Ptolemaic Egypt, adds the evidence from papyri, concluding that καθεστηκυῖα τιμή means "official price," but acknowledging along with previous scholars that in Athens, unlike in Egypt, such prices could never have been rigidly fixed. He argues instead that in Athens the phrase denotes prices established as targets for public officials purchasing grain on behalf of the state. In my view, Athenian officials are more likely to have been charged simply with buying grain as cheaply as possible. I suggest instead that the "official price" might have been the price assigned for the purpose of assessing customs duties. When local prices rose (or fell), these prices would remain fixed, at least in the short term. Men like Chrysippos, who were honored for selling at the "official price" rather than pursuing the market price, had merely agreed to sell for the same price at which their grain had been valued for customs purposes.

89. Migeotte (2001, pp. 166, 170–173), discussing two recently published inscriptions, one from Klaros (Étienne and Migeotte 1998 [= *SEG* XLVIII 1404]) and the other from Athens (Stroud 1998 [= *SEG* XLVIII 96]), observes that detailed νόμοι τελωνικοί were common in Greek city-states already in the 4th century B.C. The expression κατὰ τὰν σύγγραφον, which occurs in the inscription from Kyparissia (*Syll.*³ 952 = *IG* V 1 1421; see n. 85, above), seems to refer to a similar document; see Vélissaropoulos 1980, p. 210, n. 33. Purcell (2005) surveys the evidence and concludes that institutions related to customs collection appear to have been well developed even from a much earlier date.

90. Roman inscribed customs tariffs such as those found at Palmyra (*OGIS* 629), Zarai (*CIL* VIII 4508), and Lambaesis (*AÉ* 1914, 234) are a different matter, since they record not prices for calculating duties *ad valorem* but fixed tariffs that would have been subject to little revision.

91. As noted already by, e.g., Feyel (1936, p. 36, n. 1). The city lies on the northern straits of Euboia, roughly 20 km from Akraiphia by an easy route.

the 1960s.[92] References in ancient literature are rare: Anthedon is included in the Homeric catalogue of ships as the "furthest" Boiotian city, but it is primarily known for having been founded on the spot of Glaukos's leap into the sea and subsequent transformation.[93] The most important source is Herakleides Kritikos (fr. 1.23–24 Arenz), who provides a vivid account of the city in the Hellenistic period.[94]

> Ἐντεῦθεν εἰς Ἀνθηδόνα στάδια ρξ΄. ὁδὸς πλαγία, ἁμαξήλατος δι' ἀγρῶν πορεία. ἡ δὲ πόλις οὐ μεγάλη τῷ μεγέθει, ἐπ' αὐτῆς τῆς Εὐβοϊκῆς κειμένη θαλάσσης, τὴν μὲν ἀγορὰν ἔχουσα κατάδενδρον πᾶσαν, στοαῖς ἀνειλημμένην διτταῖς· αὐτὴ δ' εὔοινος, εὔοψος, σίτῳ σπανίζουσα διὰ τὸ τὴν χώραν εἶναι λυπράν. Οἱ δ' ἐνοικοῦντες σχεδὸν πάντες ἁλιεῖς, ἀπ' ἀγκίστρων καὶ ἰχθύων, ἔτι δὲ καὶ πορφύρας καὶ σπόγγων τὸν βίον ἔχοντες, ἐν αἰγιαλοῖς τε καὶ φύκει καὶ καλύβαις καταγεγηρακότες· πυρροὶ ταῖς ὄψεσιν, πάντες δὲ λεπτοί· τὰ δ' ἄκρα τῶν ὀνύχων καταβεβρωμένοι ταῖς κατὰ θάλατταν ἐργασίαις· προσπεπονθότες πορθμοῖς οἱ πλεῖστοι καὶ ναυπηγοί, τὴν δὲ χώραν οὐχ οἷον ἐργαζόμενοι, ἀλλ' οὐδὲ ἔχοντες, αὐτοὺς φάσκοντες ἀπογόνους εἶναι Γλαύκου τοῦ θαλασσίου, ὃς ἁλιεὺς ἦν ὁμολογουμένος.
>
> From Thebes to Anthedon is 160 stades. The road is rough, the way a wagon-track through fields. The city itself is not great in size, and lies on the Gulf of Euboia. It has an agora that is entirely shaded by trees and flanked by double stoas. The land is rich in wine and rich in fish, but has no grain owing to the poor soil. Nearly all the inhabitants are fishermen, making a living mainly from hooks and fish, but also from *murex* and sponges. They have grown old on the beaches among the seaweed and the huts.[95] They are all thin, their hair bleached by the sun, their nails cracked and worn through working the sea, and many too have labored as ferrymen and shipbuilders. Not only do they not work the land but they refuse even to own it, saying they are the heirs of seagoing Glaukos, he too a fisherman.

92. The most recent synopsis (Fossey 1988, pp. 250–257) describes the American excavations as "wretched" (p. 252). On the results of these excavations, see Rolfe 1890; the inscriptions were published separately in Buck and Tarbell 1889. I could find no additional records in the American School archives. For the survey of the harbor, see Schläger, Blackman, and Schäfer 1968.

93. *Il.* 2.508: Ἀνθηδόνα τ' ἐσχατόωσαν; explained by Strabo (9.2.13 [C 404–405]): μετὰ δὲ Σαλγανέα Ἀνθηδὼν πόλις λιμένα ἔχουσα, ἐσχάτη τῆς Βοιωτιακῆς παραλίας τῆς πρὸς Εὐβοίᾳ, καθάπερ καὶ ὁ ποιητὴς εἴρηκεν Ἀνθηδόνα τ' ἐσχατόωσαν ("After Salganeus is Anthedon, which has a harbor and is the last city on the Boiotian coast that faces Euboia, on account of which the poet calls it 'farthest Anthedon.'"). Blackman's frequently cited discussion of the ancient testimonia (Schläger, Blackman, and Schäfer 1968, pp. 25–28) overlooks a number of important literary references and a handful of inscriptions not collected in *IG* VII, as do the discussions in Rolfe 1890; *RE* I, 1894, cols. 2360–2361, s.v. Anthedon (G. Hirschfeld); *PECS,* p. 59, s.v. Anthedon (P. Roesch); and Wallace 1979, pp. 57–59. Knoepfler 1986 remains the most thorough and insightful discussion of the city and its history.

94. The description may be somewhat earlier than the inscription from Akraiphia. Dates as late as the 2nd century B.C. have been suggested for Herakleides, but Arenz in his recent edition (2006) has argued that the work was probably composed during the decade or so preceding the Chremonidean War (267–261 B.C.). For further discussion of this particular passage, see the commentaries of Pfister (1951, pp. 169–176) and Arenz (2006, pp. 151–152, 208–209).

95. Bresson (2008, p. 155) offers an interesting translation of these lines: "Lorsqu'ils sont âgés, ils passent leur temps sur le rivage à la cueillette de l'orseille ou dans des baraques de pêcheurs." The word φῦκος can indeed refer to *orseille,* a lichen *(Rocella tinctoria)* that grows on rocky Mediterranean coastlines and can be used to

Although Herakleides sometimes appears to rely on literary sources as much as autopsy,[96] his description is a valuable portrait of a modest polis whose citizens depended heavily, if not exclusively, on the sea for their livelihood.[97]

The remains of the small ancient harbor, which is now largely abandoned, include a mole on the east side and a larger, well-preserved mole on the north side. Along the south side is an enigmatic platform (Fig. 6), called by Schläger, Blackman, and Schäfer the south quay, adjacent to which were perhaps the agora and the double stoas mentioned by Herakleides.[98] The date of the harbor works is far from settled. Some scholars, perhaps relying on the assumption that the city never recovered after its destruction at the hands of Sulla, date the visible remains to the 4th century B.C.[99] Schläger, Blackman, and Schäfer, on the other hand, conclude "that all the visible remains of harbour works belong to one period . . . to late Roman or early Byzantine times."[100] The evidence is not decisive,

produce a dye. The suggestion that Herakleides here alludes to dye production is ingenious, but when technical writers use φῦκος to refer specifically to *Rocella tinctoria,* they normally include additional qualifiers (φῦκος θαλάσσιον οὖλον, Dioskourides 4.99; φῦκος πόντιον, Theophr., *Hist. Pl.* 4.6.4). In general, the word simply means "seaweed" (see *LSJ,* s.v.), and I prefer the traditional interpretation (shared by, e.g., Pfister 1951 and Arenz 2006), which also more closely reflects the syntax of the passage.

96. Pfister (1951, p. 172) suggests that elements of Herakleides' description may have been derived from the literary tradition. This might explain the reference to Anthedon as εὔοινος ("rich in wine"), a claim that is not only at odds with Herakleides' own allegation that the Anthedonians refused to own land or farm it, but also specifically contradicted by Plutarch (*Mor.* 295e–f), who states that Boiotian Anthedon was devoid of vines, much as it was when Heinrich Ulrichs visited in the 19th century (1840, p. 36: "Im Tal von Anthedon sah ich keinen Weinstock"). Plutarch's assertion appears in a discussion of an oracle attributed to the Pythian Apollo: πῖν' οἶνον τρυγίαν, ἐπεὶ οὐκ Ἀνθηδόνα ναίεις ("Drink wine mixed with lees, since you do not live in Anthedon"). Blackman argues that Plutarch's statement "is not consistent with the statement of Herakleides. Perhaps viticulture had declined in Anthedon by the time of Plutarch, so that he refused to accept what is probably the correct interpretation" (Schläger, Blackman, and Schäfer 1968, p. 27). Plutarch's explanation, however, seems to rely on an earlier discussion of the oracle by Aristotle, and, as Pfister notes, Herakleides' statement may ultimately be derived from the same, apparently well-known oracle, which was also known to Athenaios (1.31b–c). Bresson (2008, p. 260, n. 72) has suggested that in describing Anthedon as εὔοινος Herakleides does not mean to imply that it was generally "rich in wine," but only that it produced a certain amount of high-quality wine.

97. As Knoepfler (1986, pp. 596–597) observes, an interesting echo of Herakleides' description of Anthedon appears on a funerary stele found in the city, which bears the image of a hatchet in relief and the words ναυπηγός Ποσειδῶναξ (Jardé and Laurent 1902, p. 324, no. 14). Anthedon obviously was not exceptional in this regard. Pausanias, for example, alleges that half of the inhabitants of Bukis in Phokis were *murex* fishermen (10.37.3), and Strabo similarly notes that the citizens of Iasos "get the greater part of their livelihood from the sea, for the city is rich in fish but has poor land" (14.2.21 [C 658]: καὶ τὸ πλεῖστον τοῦ βίου τοῖς ἐνθάδε ἐκ θαλάττης· εὐοψεῖ γὰρ χώραν τ' ἔχει παράλυπρον). Even in coastal cities with richer agricultural economies, fishing will have played an important role; see, for example, Bresson's compelling portrait of the economy of Hermione in the southern Argolid (2008, pp. 157–160). The fundamental importance for such cities of taxes levied in their harbors was stated plainly already by Andreades (1933, p. 297); more recently, see Purcell 2005 and especially Bresson 2008, pp. 72–97.

98. See Schläger, Blackman, and Schäfer 1968, fig. 4. In the level area adjacent to the south quay, the American excavations revealed a large building with mosaics, described by Rolfe (1890, pp. 98–99) simply as a "Roman building." As is apparent from Rolfe's plan, it was actually an early Christian basilica, a fact noted already by Orlandos (1937). Nevertheless, earlier buildings may once have occupied the same site.

99. Previous scholarship on the harbor works and their date is collected and discussed in Schläger, Blackman, and Schäfer 1968, pp. 22–25. Plutarch (*Sulla* 26.3) mentions Larymna, Halai, and Anthedon as the three Boiotian cities destroyed in 86 B.C. following Sulla's victory at Orchomenos over the Mithridatic army. Knoepfler (1992, p. 478, no. 125), however, points out an overlooked inscription (*OGIS* 441 = *I. Stratonikeia* 508), which includes Ἀνθηδὼν Βοιωτίας among the cities recognizing the inviolability of the sanctuary of Hekate at Lagina in Karia. The date of the inscription is probably very close to 80 B.C., which suggests that the city soon recovered from any damage inflicted by Sulla.

100. Schläger, Blackman, and Schäfer 1968, pp. 86–89.

Figure 6. The south platform of the harbor at Anthedon

however, and until confirmed by excavation the date should remain an open question.[101]

In their search for a list of fish to include in their decree, it is possible that Akraiphian officials simply borrowed or copied a document available at Anthedon, the nearest coastal city. On the other hand, the very fact that they found it feasible to institute price limits might imply some degree of control over the supply of fish itself; otherwise, such measures could easily have led suppliers to avoid Akraiphia in favor of other, less restrictive Boiotian settlements.[102] While it is true that there is no evidence that Akraiphia ever controlled a port, it is equally true that for local Boiotian history in the 3rd and early 2nd centuries B.C. we must rely largely on inferences from inscriptions. Akraiphia certainly controlled the important sanctuary of Apollo Ptoios and seems to have taken the lead in reorganizing the Ptoia in the 220s B.C.[103] The city itself is almost entirely unexcavated; even the theater, attested in an inscription (*IG* VII 4148), has yet to be located.[104]

101. Schläger, Blackman, and Schäfer did not have permits to excavate and the Late Roman sherds that they removed from the joints between exposed blocks do not necessarily constitute evidence for the original construction date. Similarly, the argument based on construction techniques is not entirely persuasive. The masses of mortar and rubble in the north quay offer an imperfect analogy to other Late Antique limestone walls with rubble and mortar cores. This type of construction is in any case not used throughout the north quay, but restricted to parts of the structure that I suspect may have been large, square tanks. It is entirely absent from the south quay.

102. This is perhaps why Feyel (1936, p. 36) found the measure "plus radical" and "plus maladroite."

103. On the history of the sanctuary, see *RE* XXIII, 1959, cols. 1505–1578, s.v. Ptoion (S. Lauffer); Schachter 1981, pp. 52–73; and for a short discussion and bibliography, Fossey 1988, pp. 265–275. The date and nature of the reorganization of the Ptoia are addressed at length in Rigsby 1996, pp. 59–67; see also Sánchez 2001, pp. 348–349. For evidence that the festival existed before the 220s, see Rigsby 1987 (on *SEG* XXXII 456).

104. The French excavations of the 1930s under Guillon and Feyel allegedly identified the agora, but they remain unpublished beyond a few brief notes; see, e.g., *BCH* 60, 1936, p. 461. For the more recent but very limited work around the city walls, see n. 26, above. Construction of a new highway also uncovered a number of cemeteries outside the city, on which see Fossey 1988, pp. 266–269. He justly concludes: "It is a great pity that this important

Nevertheless, the visible remains of circuit walls, streets, and buildings suggest a city capable of controlling an important sanctuary and festival.

The arable land available to the citizens, on the other hand, seems to have been extremely limited. Ringed by the steep slopes of Mt. Ptoön to the east and the waters of Lake Kopaïs to the west, Akraiphia overlooks to the south one short valley, separated from the lake by a long dyke originally constructed in the Mycenaean period.[105] That the city did not control additional territory on the north side of the lake is confirmed by a 3rd-century B.C. inscription marking the boundary between Akraiphia and its neighbor Kopai, which was cut into the rocky point known as Phtelio, northwest of the city.[106] It perhaps testifies to the increasing ambitions of the Akraiphians that the Boiotian League was required to arbitrate in this dispute, which was probably motivated by economic concerns.[107]

Seeing no possibility that Akraiphia controlled additional arable land, most scholars have concluded that the Akraiphian economy cannot have been founded, like that of most inland Greek city-states, on agriculture.[108] It has been suggested that the city profited from the rich fisheries in Lake Kopaïs and, to a lesser degree, Lake Likeri.[109] Yet Akraiphia controlled very little of the Kopaïs shoreline, certainly less than its neighbors Kopai and Haliartos, and whatever revenues the city derived from that source are unlikely to have been sufficient to maintain the economy and infrastructure of a polis of its size. The sanctuary of Apollo would have contributed, indirectly, to the city's financial well-being,[110] and the rocky slopes of Mt. Ptoön itself might have supported olive groves or fed large numbers of sheep and goats.[111]

If the territorial ambitions of the Akraiphians were thwarted by Kopai to the northwest, they may have been more successful in extending their control to the east, over the villages and land lying between Lakes

and apparently well preserved site should be so poorly known; much could be learned from a full surface survey, to say nothing of an excavation."

105. Fossey 1988, p. 275, with bibliography. On the epigraphic evidence for the failure of the dyke in the Early Imperial period, and attempts to repair it, see Oliver 1971; Fossey 1979, pp. 554–560; Kalcyk 1988.

106. *IG* VII 2792; Magnetto 1997, no. 63: ὅρια Κ[ω]πήνων | ποτ' Ἀκρηφιεῖα[ς], | ὁριττ[ά]ντων Βοιωτ[ῶν].

107. On the economic origins of the dispute, see, e.g., Roesch 1965, p. 64; Magnetto 1997, p. 386. A much earlier (perhaps 5th-century B.C.) boundary marker appears to refer to the same two states: [*hὁ*ρος Ἀ]κραι-[φιέον | κ]αὶ Κοπ[αίων (Lauffer 1980, pp. 161–162, no. 1; restorations suggested by Roesch [1980, p. 2, no. 1]). A third inscription, *IG* VII 4130, of the 2nd century B.C., testifies to yet another territorial dispute, probably also between Akraiphia and a neighboring state.

108. The consensus is summarized by Fossey (1988, p. 275): "The mainstay of ancient Akraiphiai's economy can hardly have been agriculture even when the bay of *Kardhítsa* was drained, for a total of c. 7 sq. km, even though very fertile land, could not support any large population." So too, more recently, Magnetto 1997, p. 387, n. 3.

109. Magnetto (1997, p. 386, n. 3), citing Vatin's publication of the Akraiphian fish list as evidence, notes that the dispute with Kopai may have been caused primarily by competition for additional fisheries, not farmland. Fossey (1988, p. 275) offers a similar argument. The fisheries in Lake Kopaïs were no doubt important to some of the city's inhabitants, but the inscription from Akraiphia can hardly be construed as relevant evidence, given that the vast majority of the fish listed therein are marine species.

110. Fossey 1988, p. 275.

111. The use of public land for grazing is documented in an inscription of the last quarter of the 3rd century B.C. (*SEG* III 356), in which a certain Kallon, probably an Akraiphian citizen, is recorded as having forgiven the city an outstanding principal of 672 drachmas, 5½ obols, together with 835 drachmas of interest accumulated over five years. This generosity was rewarded by a grant of grazing rights *(epinomia)* for 50 animals in perpetuity. Kallon's considerable wealth may have derived from his flocks. In a second inscription (*SEG* III 359), a certain Euklidas is recorded as having forgiven more than half of a loan of nearly a talent, for which the city had offered as security land sacred to Apollo. How the land was used is not stated, but grazing is not unlikely. See further Migeotte 1984, pp. 74–78, no. 16; Chandezon 2003, pp. 45–47, no. 8.

Likeri and Paralimni in the stony valley descending toward Anthedon.[112] Ancient sources record four settlements in this area (Hyle, Peteon, Schoinos, and Trapheia) and no fewer than five archaeological sites have been detected.[113] The region has traditionally been considered part of the territory of Thebes,[114] an attribution dependent on the testimony of Strabo (9.2.22, 26 [C 408, 410]), who reports that the κώμη of Peteon and the χώρα of Schoinos lie near the road from Thebes to Anthedon and are in the territory of Thebes.[115]

Strabo, however, is not necessarily a reliable source for the political divisions of Hellenistic Boiotia. One need look no further than his assertion (9.2.34 [C 413]) that Mt. Ptoön and the sanctuary of Apollo Ptoios also formed part of the territory of Thebes. This claim may have been true when it was first made by Herodotos (8.135), but it can hardly apply to the 3rd and 2nd centuries B.C.[116] It is likely that Akraiphia or Anthedon, or perhaps both, gained control over additional territory after the destruction of Thebes and the partition of its territory in 335 B.C., when, as Pausanias (9.23.5) notes, many of the survivors fled to Akraiphia, a city that had been once in Theban territory.[117] Although it is certain that much of the territory of Thebes was eventually restored, there is little reason to assume that the statements of Strabo offer firm evidence for territorial borders during the 3rd and early 2nd centuries B.C., or indeed at any point after 335.[118] Nevertheless, among modern scholars, only Thomas Corsten has placed the settlements of Schoinos and Peteon outside the territory of Thebes.[119]

112. Fossey 1988, p. 226. The amount of dry land in the area was apparently somewhat larger and the lakes themselves smaller before the draining of the Kopaïc basin. Today water is diverted away from the basin and into these two lakes by means of ditches and a tunnel that begins just west of ancient Akraiphia.

113. Hyle, Peteon, and Schoinos are mentioned in the Catalogue of Ships (Schoinos in *Il.* 2.497, Hyle and Peteon in 2.500; Hyle is mentioned again at 7.221). Additional references are collected in *RE* II, 1923, cols. 616–617, s.v. Schoineus/Schoinos (L. Burchner); *RE* IX, 1916, cols. 117–119, s.v. Hyle (F. Bölte); and *RE* XIX, 1937, col. 1128, s.v. Peteon (E. Kirsten). A fourth site, Trapheia, is mentioned only by Nikander (*Ther.* 887) and Stephanos, s.v. Τράφεια. On the various archaeological sites in the area and the possible identification of some of these with the four settlements attested in our ancient sources, see Fossey 1988, pp. 225–247.

114. See, e.g., Fossey 1988, pp. 225–247; Roesch 1965, p. 49, map 3.

115. Although Strabo mentions Peteon and Hyle together, and states explicitly that Peteon is a village belonging to Thebes, he makes no such assertion about Hyle. He does, however, imply that at some point Lake Hylike itself was in the territory of Thebes, and with it, presumably, the settlement of Hyle on its shores: ἡ μὲν γάρ ἐστι μεγάλη [Lake Kopaïs], καὶ οὐκ ἐν τῇ Θηβαΐδι, ἡ δὲ μικρά [Lake Hylike], ἐκεῖθεν δι' ὑπονόμων πληρουμένη, κειμένη μεταξὺ Θηβῶν καὶ Ἀνθηδόνος (9.2.20 [C 408]) ("Lake Kopaïs is large and not in the territory of Thebes, but Hylike is small, is filled through underground channels from Kopaïs, and lies between Thebes and Anthedon."). Most scholars assume that Akraiphia would have had access to Lake Likeri, sometimes identified with the ancient Hylike. Fossey (1988, pp. 225–229), however, identifies Hylike with the modern Paralimni, an argument for which this passage perhaps offers some support.

116. Strabo's probable dependence on Herodotos in this passage is noted by Roesch (1965, p. 48).

117. On the destruction of Thebes, see Arr. *Anab.* 1.9.9; Diod. Sic. 17.8–14; Just. *Epit.* 11.24; Plut. *Alex.* 11.

118. The restoration of Thebes under Cassander is recorded by Diod. Sic. 19.53, Paus. 9.7.1, and *IG* VII 2439, on which see Holleaux 1938. The restoration, and the eventual return of Thebes to the Boiotian League, which epigraphic sources confirm was delayed for nearly three decades, has recently been discussed by Knoepfler (2001). The question of Boiotian territorial divisions specifically during the period of the Third Boiotian League (338–171 B.C.) is addressed by Roesch (1965, pp. 46–73), whose reliance on Strabo is manifest. Roesch recognizes, however, that each territory and city deserves a detailed study taking into account all available evidence (p. 48, n. 3).

119. Corsten 1999, pp. 27–60 (for the Boiotian League) and esp. p. 44 (for a map of the region during the 3rd century B.C.). Corsten argues that Boiotia in the 3rd century was divided into seven federal districts. Schoinos and Peteon appear to lie in the district whose major settlements included Haliartos, Akraiphia, Anthedon, Halai,

If the Akraiphians did in fact gain possession of some or all of this territory, then Akraiphia and Anthedon may have shared a common border in the 3rd century B.C. There is no evidence to suggest that Akraiphian control extended as far as Anthedon itself—indeed, it is clear that Anthedon, having gained its independence from Thebes in the 4th century, remained an independent member of the League for much of the following century[120]—but that does not preclude the possibility of some other kind of relationship between the two cities. It is tempting to see a parallel between Anthedon and the Cretan city of Stalai, which was allowed by its stronger neighbor Praisos to maintain its independence, but was forced to hand over half of the revenues accruing from its 10% duty on fish.[121] Similarly, given the increased importance of the reorganized Ptoia in the late 3rd century B.C., one might suggest an analogy between Akraiphia and other cities that controlled important sanctuaries, each affiliated with a corresponding "sacred harbor."[122] Whatever the details of the relationship, it seems likely that the alphabetized list of marine fish names in the Akraiphian decree, like the fish themselves on sale in the city's regulated fish market, originated in Anthedon.

ACROPHONIC NUMERALS, FISH PRICES, AND REGULATION OF SALES

If the alphabetized list did indeed originate in a customhouse at Anthedon, it cannot be taken as a reliable indicator of the number and variety of species actually sold in the fish market at Akraiphia. Many of the species listed may have appeared more frequently on the docks or in the wholesale market at Anthedon than in inland retail markets. Nevertheless, the prices recorded in the inscription, which must have been determined by Akraiphian officials

and Boumeliteia. Knoepfler (2002, pp. 146–147 and p. 155, fig. 7), while accepting Corsten's theory in its broad outline, redraws Corsten's map to once again place these settlements under Theban control. Scholarly reluctance to assign any of this territory to a district other than Thebes may be due not only to Strabo but to Herakleides' description of Anthedon as small and its inhabitants as essentially landless (see, e.g., Gullath 1982, pp. 77–82). This reasoning, however, ignores a second possibility: that Akraiphia, not Anthedon, controlled much of this area.

120. A number of Anthedonian citizens served as federal magistrates: Ἀριστοκλεῖς Ἀγασιῆος (*IG* VII 2723, line 4) and Ἀρνοκλεῖς Ἀνιοχίδαο (*IG* VII 3207, line 8) sat on the council of *ephedriates*, the former ca. 285 B.C. and the latter perhaps between 240 and 230 B.C.; see Knoepfler 1986, p. 606; Étienne and Knoepfler 1976, pp. 294–295; Étienne and Roesch 1978, pp. 365–366, 373–374. Knoepfler (1986, pp. 606–608) proposes that the Ποτιδάϊχος Καλύνθω Ἀνθαδόνιος who appears in a federal decree from the Amphiareion (*SEG* I 115) should be identified with the Ποτιδάϊχος who served as archon of the League in the 220s; if so, it would imply that he and other Anthedonians probably served in a number of lesser offices as well.

121. A decree issued by Praisos, apparently precipitated by a conflict with Stalai, includes the following stipulation (Chaniotis 1996, no. 64 [= *Syll.*^{3} 524], lines 4–8): ἐπὶ τοῖσδε ἔδωκαν Πραίσιοι Σταλίταις τὰν χ|ώρ̣αν καὶ τὰν πόλιν καὶ νάσους τὰς καὶ νῦν ἔχον|[τι κ]αὶ ἐλλιμενίου καὶ πορφύρας καὶ ἰχθύων δεκά|[τα]ς, τούτων πάντων τὸ ἥμισσον, ἰχθύωμ μὲν καθάπε|[ρ κ]αὶ πρότερον ("On the following conditions, the Praisians gave to the citizens of Stalai the land, the city, and islands that they now hold, and, of the [standard] customs duty and the tithe on *murex* and fish, of all of these [the Praisians give] half, with respect to that on fish just as previously"). Similarly, according to Strabo (13.3.6 [C 633]), Aeolic Kyme had at a much earlier date and for unspecified reasons ceded its right to collect customs duties.

122. See, e.g., Robert's discussion (1960, pp. 197–200) of Athenian attempts to appropriate revenues from the ἱερὸς λιμήν of the Amphiareion. Roesch (1965, p. 165) suggests a similar relationship between Thespiai and the port of Kreusis, which the city seems to have controlled continuously.

themselves, still offer valuable evidence for the cost of fish at Akraiphia and in Hellenistic Greece generally. Most of the discussion prompted by Vatin's publication of the inscription has been concerned with these prices, either with their relative values compared to other commodities, or with their actual values in local currency.

Discussions of actual values require an understanding of the acrophonic numeral system employed at Akraiphia, for which this inscription offers the only evidence.[123] The system uses four symbols in descending order: I, H, Π, and X. Three of these are easily construed: the first is an obol, the second a hemi-obol, and the last a chalk, which, in Boiotian currency, is one twelfth of an obol. Comparison with other acrophonic systems suggests that Π should stand for πέντε and represent five chalks. That interpretation, however, would introduce apparent redundancies into the values expressed in the inscription, a fact that has led scholars, beginning already with Feyel, to suggest alternative solutions. The most plausible of these is the proposal of Joshua Sosin, who suggests that Π stands for πέτταρες, Boiotian for "four," here indicating four chalks.[124] Sosin's solution has the advantage of introducing superfluities at only two points in Vatin's text. One of these (in line B.8) is based on a false reading by Vatin; the other (in line A.i.19) could well be the product of a similar error, although I was unable to examine block A and therefore cannot confirm or correct the reading.[125] To the points made by Sosin one might add that under his system the value of HΠX, by far the most common price recorded in the inscription, would be not one obol and six chalks, but 11 chalks. That price, one chalk short of an obol, might suggest an attempt to keep prices below a psychologically significant barrier.

Although the correct interpretation of the prices listed in the inscription may appear to be a trivial issue, it has important consequences. As Gallant writes in the crowning argument of his attack on Rostovtzeff, "The final link of the orthodox chain of argumentation can now be confronted: was fish cheap?"[126] On the basis of the inscription from Akraiphia, he answers in the negative. Alleging that fish "was expensive, on average thirteen times more expensive than wheat," he concludes that for the Greeks it would have remained a luxury item, eaten only on special occasions by a privileged few.[127] Others have followed suit. David Schaps, for example, uses the prices of fish at Akraiphia to conclude that "there was nothing intrinsically inflationary about the dialogue of Attic comedy,"[128] while James Davidson cites both Gallant and Schaps in support of his assertion that "a dinner-party with fish-dishes served to several guests . . . would be out of the question for any but the most wealthy. A bottle of champagne, perhaps, proves a useful modern parallel."[129]

These claims rest on thin evidence. Gallant arrives at his ratio of 13:1 by comparing the prices of fish with the price of wheat as recorded in an inscription of the 2nd century B.C. from Chaironeia.[130] The ratio, however, is not based simply on the prices charged for standard measures (for example, the price of a mina of fish vs. the price of a choinix of wheat), but rather on a calculation of the total caloric content per drachma. A number of scholars have justly criticized this method, noting that it equates the absolute value of fish, a food low in energy but high in nutrients, with its caloric content, while ignoring altogether its considerable cultural

123. See Feyel 1936, pp. 32–33; Tod 1936–1937, p. 245 [= 1979, p. 71]; Vatin 1971, pp. 102, 104; Schaps 1987; Sosin 2004.

124. Sosin 2004.

125. Vatin's ΠΧΧ in line B.8 is impossible; there is no evidence of a second *chi* on the stone (nor does Feyel record any), and he has missed the ligature in HΠ. In line A.i.19 Vatin gives ΠXX. Following Sosin this would denote six chalks, for which we would expect instead H, a half-obol. Sosin (2004, p. 195) suggests that correct reading may be HXX.

126. Gallant 1985, p. 39.

127. Gallant 1985, p. 40.

128. Schaps 1988, pp. 69–70. On price inflation in comedy, see Finley 1952, p. 267, n. 29. As Schaps concedes, many of the prices in Attic comedy are obviously exaggerated for humorous effect. Still, even the prices he takes to be "real" find little or no support in the Akraiphian decree.

129. Davidson 1997, p. 187.

130. The inscription was published by Feyel (1942b, p. 80, no. 3), who arrived at a figure of 3.5 drachmas per medimnos (pp. 84–85). The text, however, actually records the price of grain purchased by κόφινος (lines 6, 8–10), a measure whose volume cannot be determined with any certainty.

value.[131] Still, no one has challenged Gallant's argument on its own terms or pointed out that his data are fundamentally flawed.

In calculating the price of fish, Gallant relies exclusively on the decree from Akraiphia and the readings provided by Vatin.[132] The prices of only a dozen fish are used, and for eight of these the price recorded by Vatin is ΙΠΧ. But Vatin's reconstruction of the Akraiphian numeral system is, of all those proposed, the least likely, because he ignores the ligature in the most common price, ΗΠΧ, reading it instead as ΙΠΧ, which he interprets as one obol and six chalks. There is no parallel for the inscription of the letters ΙΠ in ligature, and the sum of one obol and six chalks could more easily have been written as ΙΗ.[133] Simply restoring the ligatures has the effect of decreasing the most common price by six chalks. Sosin's interpretation of the sign Π reduces the price by an additional chalk. It follows that in eight of 12 instances, or two-thirds of his entire sample, Gallant has overestimated the price of fish by 65%.[134]

Moreover, Gallant's ratio assumes too light a value for the mina used at Akraiphia. Citing work on Boiotian coinage, Gallant concludes that the official weights (στατθμῦ[ς] κο[θ]αροῖς, line A.i.7) employed by Akraiphian fishmongers would have been calibrated on a coin standard of ca. 430 g.[135] Coin standards and retail weights need not be the same, however, and an Aiginetan mina equal to ca. 630 g is far more likely, as Feyel and others had already noted.[136] In Athens too during this period it appears that a μνᾶ ἐμπορική equivalent to 138 drachmas, or ca. 600 g, was the standard.[137] In assuming a mina of 430 g, Gallant appears to have overestimated the cost of fish by an additional 40% or more.

Yet another weakness in Gallant's calculation is his assumption that the prices preserved in the inscription are average prices. He may be right, but in my view it is much more likely that they represent maximum prices, and that nothing prevented fishmongers from selling their wares at a lower price if they chose to do so. As ancient sources attest and modern comparative evidence confirms, fish prices tend to fluctuate widely in response to seasonal changes in supply, and even over the course of a single day.[138] Fresh fish is unlike most other commodities in that an unpredictable supply

131. See Powell 1996, pp. 14–15 ("his strictly caloric interpretation of food resources is somewhat simplistic"); Rose 2000, p. 517 ("misleading"); Bekker-Nielsen 2002a, p. 32 ("absurd"); Wilkins 2005, p. 22 ("misconceived").

132. Gallant 1985, pp. 39–41, figs. 6, 7.

133. Vatin (1971, p. 102) notes that ligatures in the group ΗΠΧ occur frequently, but in his text and apparatus he records only ΙΠΧ. Based on Vatin's treatment of these numbers on block B, I have taken the liberty of restoring ligatures in lines A.i.39, A.ii.7, and A.ii.22 as well, even though I have not been able to examine the stone. There is no reason to expect any of these species to fetch a higher price than 11 chalks. (The reading ΙΠΧ without a ligature does occur once on block B, line B.32. Given the extremely worn surface of the stone, all traces of the ligature may have been effaced, or this may be an error of omission by the stonecutter. On the other hand, the fish in this case is a noted delicacy, eel, for which a price of one obol and five chalks is not unimaginable. Also, the combination of eta and pi appears to have been inscribed once without ligature, at A.ii.21.).

134. It will be apparent that other studies relying on the prices given by Vatin or Gallant are equally unreliable: see, e.g., most recently, Mylona 2008, pp. 104–105, table 9.1; Collin-Bouffier 2008, pp. 101–103, and appendixes 2 and 3, pp. 117–120.

135. Gallant 1985, p. 39.

136. Feyel 1936, p. 31; see also Schaps 1988, p. 67. Feyel (1936, pp. 32–33, citing Hultsch 1882, p. 543) also considered the possibility of a Boiotian mina equivalent to 2.5 Roman pounds, or roughly 819 g. On the basis of a "Theban" mina mentioned by a single 4th-century A.D. source (Epiphanios, *De mensuris et ponderibus* 314), Hultsch had concluded that the Boiotians preserved the use of this ancient unit of measure. Feyel (1936, p. 32, n. 2) is rightly skeptical of the authority of Epiphanios.

137. See *IG* II² 1013.

138. On the daily volatility of fish prices, see Reger 2003, p. 175, n. 28.

is combined with a remarkably short shelf life. Fish that are beginning to turn must be sold promptly, and those that are well on the road to rotten can be had for steep discounts, as can the leftover scraps of the larger fish sold in cuts: in antiquity, the head of a tuna might have made a fine soup but it would not have cost the same as a tuna steak.[139]

This is the reality that underlies a passage by the comic poet Alexis (fr. 130 K-A; Athen. 6.226a–b), in which an Athenian named Aristonikos proposes a law to regulate fish sales:

> οὐ γέγονε κρειττων νομοθέτης τοῦ πλουσίου
> Ἀριστονίκου. † τίθησι γὰρ νυνὶ νόμον,
> τῶν ἰχθυοπωλῶν ὅστις ἂν πωλῶν τινι
> ἰχθὺν ὑποτιμήσας ἀποδῶτ' ἐλάττονος
> ἧς εἶπε τιμῆς, εἰς τὸ δεσμωτήριον
> εὐθὺς ἀπάγεσθαι τοῦτον, ἵνα δεδοικότες
> τῆς ἀξίας ἀγαπῶσιν, ἢ τῆς ἑσπέρας
> σαπροὺς ἅπαντας ἀποφέρωσιν οἴκαδε.
> κἀνταῦθα καὶ γραῦς καὶ γέρων καὶ παιδίον
> πεμφθεὶς ἅπαντες ἀγοράσουσι κατὰ τρόπον.
>
> Has there ever been a better lawgiver than wealthy Aristonikos? He has just now proposed a law that, if any one of the fishmongers, having stated the price of his fish, should then sell his fish for less than the price he stated, he shall immediately be led off to prison, so that the fishmongers, properly frightened, will be content with fair value or else carry all their fish home rotten in the evening. Thus the old woman and the grandpa and the mere child sent to market will all in good order purchase fish.

Earlier scholars have often assumed that the law proposed by Aristonikos in this passage is a comic fiction, and Becker[140] suggested that it was a parody of Plato, echoing *Leg.* 11.917b–c:

> ὁ πωλῶν ὁτιοῦν ἐν ἀγορᾷ μηδέποτε δύο εἴπῃ τιμὰς ὧν ἂν πωλῇ, ἁπλῆν δὲ εἰπών, ἂν μὴ τυγχάνῃ ταύτης, ἀποφέρων ὀρθῶς ἂν ἀποφέροι πάλιν, καὶ ταύτης τῆς ἡμέρας μὴ τιμήσῃ πλέονος μηδὲ ἐλάττονος.
>
> Whoever sells anything in the agora will not name two prices for the goods he sells, but he will name a single price and if he does not obtain it he will promptly be allowed to take back his wares, and on that same day he will not name another price whether more or less.

There are good grounds for rejecting Becker's proposal, however, and the Aristonikos mentioned by Alexis is best identified with a politician from Marathon known to have authored a number of other laws during the period 334–322 B.C.[141] Moreover, Plato's law is only accidentally similar to the proposal of Aristonikos. Plato wished to eliminate bargaining, or haggling, a practice that, as an affront to truth, he seems to find inherently distasteful. Davidson suggests that Aristonikos had a similar purpose.[142] It is true that Aristonikos's law would, as a matter of course, prevent bargaining, but bargaining *per se* is not the law's primary concern. Rather it

139. Athenaios (7.303a) quotes an apposite fragment of Alexis (fr. 159 K-A): οὗτος πρότερον κεφαλὴν εἰ λάβοι θύννου / ἐνόμιζεν ἐγχέλεια καὶ θύννας ἔχειν ("This guy, if he got hold of a tuna head, reckoned he had eels and tuna steaks"). Athenaios interprets the passage as praise of tuna heads, a reading that obviously misses the point.

140. Becker 1878, p. 205.

141. Becker's hypothesis was thoroughly critiqued already by Höppener (1931, pp. 137–139), and more recently by Arnott (1996, pp. 363–364), who concludes that "we have no reason to doubt here an allusion to contemporary history, and the identification of Alexis' lawgiver with the politician Aristonicus of Marathon." On this Aristonikos see *LGPN* II, s.v., no. 4; Hansen 1983, p. 161.

142. Davidson 1993, p. 56; 1997, pp. 189–190.

is that fish prices fluctuate wildly over the course of a day. Depending on the availability of a sufficient number of buyers, a fishmonger can demand an extravagant price, then gradually lower it as demand or the quality of his supply dwindles, and if anything is left near closing time he will dump it for the best price he can get. Under such conditions, only those willing to watch the market all day can get a reasonable deal, while the elderly and disabled or the child sent to purchase fish for the family have to pay whatever outrageous price momentarily prevails.

This proposal must be considered together with another passage usually attributed to Alexis (fr. 131 K-A; Athen. 6.226b–c),[143] in which Aristonikos appears again as the author of a different law aimed at the same problem:

> οὐ γέγονε μετὰ Σόλωνα κρείττων οὐδὲ εἷς
> Ἀριστονίκου νομοθέτης· τά τ' ἄλλα γὰρ
> νενομοθέτηκε πολλὰ καὶ παντοῖα δή,
> νυνί τε καινὸν εἰσφέρει νόμον τινὰ
> χρυσοῦν, τὸ μὴ πωλεῖν καθημένους ἔτι
> τοὺς ἰχθυοπώλας, διὰ τέλους δ' ἑστηκότας·
> εἶτ' εἰς νέωτά φησι γράψειν κρεμαμένους,
> καὶ θᾶττον ἀποπέμψουσι τοὺς ὠνουμένους,
> ἀπὸ μηχανῆς πωλοῦντες ὥσπερ οἱ θεοί.
>
> No lawgiver since Solon has been greater than Aristonikos. He has introduced all sorts of other laws, and now he is introducing a new law, a golden one, that the fishmongers can no longer sell sitting down, but must stand up the whole time. And next year he says he'll propose they do it hanging suspended, and so send the purchasers away even more quickly, dealing from a machine like the gods [on the stage].

The passage is obviously a comic invention, but the proposal that fishmongers not be allowed to sit down, absurd as it seems, is less certainly invented. If this is in fact a genuine proposal by Aristonikos (as that in the previous fragment is generally held to be), it can only have been motivated by the idea that a fishmonger who is forced to stand up will be more willing to unload his merchandise for a fair price as quickly as possible.[144] The

143. Athenaios quotes this fragment immediately after the fragment discussed above (fr. 130 K-A; in the epitome the order in which the fragments are given is reversed), which he attributes to a play titled "The Cooking-Pot" (Λέβης). The words with which he introduces the second fragment (καὶ προελθὼν δέ φησιν) suggest that the two form a single continuous passage, but Meineke (1867, p. 97) is probably correct in arguing that the second quotation cannot belong to the same play, since it introduces Aristonikos for a second time, and in nearly identical language. Meineke suggests that after fr. 130 and before καὶ προελθὼν δέ φησιν an additional fragment from a different play has fallen out of the text. Arnott (1996, p. 365) argues, less persuasively in my view, that the two fragments could in fact belong to the same play.

144. That both measures are genuine was argued already by Höppener (1931, pp. 136–139). More recently, Arnott has suggested that the first (fr. 130) is probably authentic, but the second (fr. 131) "is a grotesque and extravagant fancy of the comic poet's, preparing the way for a παρὰ προσδοκίαν joke" (Arnott 1996, p. 381). This characterization perhaps exaggerates the absurdity of the proposal, which would prepare the way for the joke just as effectively if it were in fact genuine. On the possibility that the characterization of Aristonikos as νομοθέτης reflects the fact that he proposed his measures not in the assembly but as a member of a board of νομοθέται, see Arnott 1996, pp. 377–378.

dilatory practices attributed to fishmongers in ancient sources seem to have been intended to get a better price.[145]

The proposals attributed to Aristonikos seem to acknowledge that it was impractical for the state simply to fix fish prices. Indeed, they recognize and make allowances for the fact that the price of fish will fluctuate from day to day, week to week, and season to season.[146] As at Delos, where the regulation of wood and charcoal imports stopped short of simply prescribing a price, Greek lawmakers and market officials seem to have been willing to regulate sales, but hesitant, at least under most circumstances, to simply fix prices.

A well-known imperial letter from Pergamon, probably of Hadrianic date, is frequently cited as evidence for the regular fixing of prices (*OGIS* 484 [Oliver 1989, no. 84], lines 16–22):

> ὅσα μέντοι τῶν λεπτῶν ὀψαρίων σταθμῶι πιπρασκόμενα τιμᾶται ὑπὸ | τῶν ἀγορανόμων, τούτων, κἂν πλείονας μνᾶς ὠνήσωνταί τινες, ἤρεσεν ἡμεῖν τὴν τιμὴν αὐτοὺς διδόναι πρὸς κέρμα, ὥστε ἀπ' αὐτῶν σώσ|ζεσθαι τῆι πόλει τὴν ἐκ τοῦ κολλύβου πρόσοδον. ὁμοίως καὶ ἐὰν πλείο|νες συνθέμενοι ἀργυρῶν δηναρίων δόξωσιν ἠγορακέναι εἶτα διαι|ρῶνται, καὶ τούτους λεπτὸν διδόναι χαλκὸν τῶι ὀψαριοπώληι ἵνα ἀνα|φέρηται ἐπὶ τὴν τράπεζαν.
>
> And regarding those small fish sold by weight and with prices fixed by the *agoranomoi,* even if individuals should purchase many minas of them, I deem it best that they pay the cost in bronze coin, so that the proceeds from the exchange are preserved for the city. Likewise, even if many individuals should get together in order to make a purchase in silver *denarii* and then divide it up, even they should pay the fishmonger in bronze coin in order that he may deposit it with the bank.

In my view, this document ought to be interpreted far more narrowly. The necessary context is that merchants in the Pergamene agora were obliged to use approved bankers to exchange local bronze for silver *denarii* at a fixed rate of 18:1, one *as* more than the normal exchange rate for *denarii* to *asses.* The state, and its approved bankers, profited, not from the average citizen, but from the merchants who were forced to pay one additional *as* for every *denarius* when exchanging the bronze coin that they collected from customers. The system had apparently broken down when merchants began to exchange *denarii* directly, or to encourage transactions using only *denarii,* thereby bypassing the bankers, who in response apparently tried to charge one *as* every time a *denarius* was used in the market. The emperor

145. Athenaios (6.224c–227b) collects passages illustrating the abuses of fishmongers, particularly at Athens. Among them is a fragment attributed to Amphis (fr. 30 K-A; Athen. 6.224e), which describes a seller who, when approached with an offer, "crouches in silence like Telephos . . . pretending to pay no attention or to not have heard, and pounds on an octopus" (ἔκυψεν ὥσπερ Τήλεφος / πρῶτον σιωπῇ . . . / ὡσεὶ † προσέχων δ' † οὐδὲν οὐδ' ἀκηκοὼς / ἔκρουσε πουλύπουν τιν', lines 6–10). Some scholars (e.g., Gauthier 1977, pp. 204–205) nevertheless continue to suspect that all of the measures Alexis attributes to Aristonikos are simply comic invention.

146. The reality behind this assumption is evident in the first letter of Alkiphron, which describes a halcyon day following three days of winter storms that prevented the fishermen from launching their boats. When they finally return to the beach at Phaleron after a good catch, they find the dealers waiting, ready to buy everything except the undersized fish (τῶν λεπτοτέρων ἰχθύων). The price of fresh fish no doubt increased during such periods of shortage.

then stepped in with this letter to clarify that only the bankers were to exchange *denarii* and only *asses* were to be used in the market.

Of all the products sold in the market, only τὰ λεπτὰ ὀψάρια (line 16) warrant special mention in the Pergamene document. Bresson follows Oliver in translating the phrase as "fish sold retail," suggesting that at Pergamon fish prices were generally fixed.[147] Anthony Macro similarly infers from this clause that "essential foodstuffs were priced by the *agoranomoi.*"[148] The language of the inscription, however, as well as its context, suggests that τὰ λεπτὰ ὀψάρια are the same fish called "little fish" by Athenaios (τῶν λεπτῶν ἰχθυδίων, 7.303a) and still referred to in similar terms in Greece today: the anchovy, sardine, and atherine, which remain for many the only affordable option.[149] The larger varieties would have been sold whole or in cuts, making it difficult for groups of customers to go in together on exactly one *denarius*'s worth of, say, gilthead; even if the price were fixed, the exact cost would not be known until the fish was placed on the scale. Customers could, however, and apparently did, purchase exactly one *denarius*'s worth of small fry. The wording implies that the price was rather low and that one *denarius* might purchase a fair quantity, which explains why these customers were going in together on a single purchase. The fishmongers might have encouraged this by passing on the cost of exchange to customers paying in bronze, or perhaps by offering a marginally better price to customers willing to pay in silver *denarii.*

In his letter addressing the problem, the emperor is careful to specify that all transactions, even those involving purchases worth exactly one *denarius,* must employ bronze currency. At the same time, however, he reiterates that bankers must exchange *denarii* into bronze coin at the rate of 1:17 (lines 22–24). Even though the state is carefully protecting its interests (the value of the banking concession), consumers are also protected: the cost of exchange is to be borne solely by the fishmongers, with the fixed price for small fry ensuring that it is not passed on to those who can least afford it. There is no reason to suspect, on the basis of this inscription, that any fish other than these small fry were sold at a fixed price in the market at Pergamon.

Another letter ascribed to Hadrian, usually interpreted in a narrow Eleusinian context and taken to imply a shortage of fish during the mysteries, is probably more concerned with the larger problem of prices at Athens, which were apparently high enough that Eleusinian fishermen were choosing to sell their fish in Piraeus rather than in their home port.[150] The emperor's proposed solution, intended to increase supply and simultaneously lower costs by cutting out middlemen, again stops well

147. Bresson 2000a, p. 175, n. 106; 2008, p. 42.

148. Macro 1976, p. 175.

149. Oliver translates ὀψαριοπώλῃι (line 22) as "salt fish dealer," but as Davidson (1997, p. 27) notes, by the 2nd century A.D. the terms ὄψαρον and ὀψάριον were "perfectly commonplace words for fish, not smoked, and not necessarily cooked." This is well illustrated by a 2nd-century inscription from Tralles in which an illustrious citizen is honored for, among other things, donating 12 marble tables, together with their bases, ἐν τῇ ὀψαριοlπώλει⟨δι⟩ ("in the fish market") (*I. Tralleis* 77, lines 18–21: ἀναθέντα δὲ ἐκ τῶν | ἰδίων καὶ τὰς ἐν τῇ ὀψαριοlπώλει⟨δι⟩ μαρμαρίνας τραπέλζας ιβ′ σὺν ταῖς βάσεσιν ⟨ι⟩β′). Marble tables are easy to wash, provide good surfaces on which to cut, and are a common feature of ancient fish and meat markets.

150. *IG* II² 1103; Oliver 1989, no. 77. See most recently Lytle 2007a.

short of attempting to fix prixes. At least in Athens it seems that emperor and *agoranomoi* alike recognized that fish prices could not simply be fixed without adversely affecting supply.

The evidence discussed above suggests that the prices for fish recorded at Akraiphia (and in the similar inscription from Delphi) are not fixed prices, but maximum prices, intended, at least on the surface, to protect consumers from abuse during periods of shortage or increased demand. On occasion fishmongers would no doubt have been forced to sell at a discount, and it is possible that the species listed in the decree often sold for less, perhaps sometimes for considerably less, than the listed price.

The issue of commercial middlemen, raised in Hadrian's letter to Athens, suggests yet another way in which Gallant's use of the price data from Akraiphia may be problematic. The emperor clearly believed that the profits made by middlemen contributed to the high price of fish in Athens. At Akraiphia the problem would have been even more pronounced. The distance between Akraiphia and the port at Anthedon (ca. 20 km) may not have prevented a regular supply of fish from reaching the town, but the cost of overland transportation must have added markedly to the eventual sale price.[151] If so, then the prices attested at Akraiphia may not be representative of those in other towns, especially near the coast.

In short, a trip to the ancient fish market was probably much less costly than Gallant and the scholars who share his assumptions would have us believe. Precisely how expensive was it? For all of the reasons discussed above, I hesitate to extrapolate based on the prices recorded at Akraiphia. The average maximum price in this inland town appears to have been approximately nine obols per local mina. As comparative data from the Adriatic and the Aegean demonstrate, however, the species listed with a price of 11 chalks (*pesce nobile* or *pesce fino* in 19th-century Adriatic markets) are typically captured in smaller volumes than those listed with lower prices. The lesser species (*pesce ordinario* or *pesce populo* in Adriatic markets) could usually be

151. Reger (2003, p. 174) suggests that the "relatively low" prices recorded in the inscriptions from Delphi and Akraiphia "recognize the likelihood that fish offered for sale at these sites relatively far from the sea may have already suffered by the time they reached the market." This ignores basic economic realities: the only incentive for transporting fish between coastal and inland markets, and incurring the associated costs of transport, was an opportunity to make a profit: the increased cost of seafood in inland markets is necessary if it is to arrive there at all. For an overview of the costs associated with land transport in antiquity, often cited as one of the most important restraints on economic growth, see Bresson 2007, pp. 86–91. Fresh seafood could, however, be purchased in towns even farther from the coast than Akraiphia. Aristotle (*Rh.* 1365a25–26) quotes an epigram for an Olympic victor (occasionally attributed to Simonides [fr. 163 Bergk]): πρόσθε μὲν ἀμφ' ὤμοισιν ἔχων τραχεῖαν ἄσιλλαν / ἰχθῦς ἐξ Ἄργους εἰς Τεγέαν ἔφερον ("With the rough yoke on my shoulders I used to carry fish from Argos to Tegea"). The Arkadian fish trade is also attested in one of the inscribed *iamata* from Epidauros (*IG* IV² 1 123, lines 21–29). The text of this passage is extremely lacunose and has been read and restored in a number of different ways; see, e.g., the provisional text and apparatus prepared by R. Merkelbach, published in Dillen 1994, p. 260 (*SEG* XLII 293). It is clear, however, that it recounts the experience of a fishmonger who carried his merchandise from the coast to Tegea in order to sell it in the agora.

had for as little as half the price of the better varieties, and many would have been available in greater quantities.[152] At Akraiphia the average cost of a mina of seafood was probably between half an obol and nine chalks.

Who at Akraiphia would have been able to pay these prices? No one has ever suggested that an unskilled laborer could afford to walk into the market and buy a tuna belly steak or a Boiotian eel, the two most expensive fish listed in the inscription.[153] It is important to bear in mind Rostovtzeff's claim, ignored by Gallant, that "the poorer classes [were] almost entirely dependent for their *opson* on the cheaper qualities and especially on salted and dried fish."[154] Yet these are precisely the products that are not adequately documented by the inscription from Akraiphia. Because of the poor state of preservation, no prices are preserved for the species that ancient sources and comparative evidence suggest would have been most affordable and available in the largest quantities, the ἰχθύδια λεπτά, or small fry. Nor is there any entry at all for preserved fish.[155] This omission is no accident: it is clear from the literary evidence that the sale of salted fish was a distinct trade, separate from that of fresh fish.[156] Documentary evidence from the

152. On the different classes of fish sold in Adriatic markets, see Faber 1883, pp. 141–143. In Akraiphia, the species accompanied by the most commonly preserved price, 11 chalks, are generally the same species considered *fino* in Adriatic markets, such as gilthead and red mullet. The prices listed for lesser species, like skate, generally hover around half an obol. Recent Aegean catch data are collected by the Fishery Information, Data, and Statistics Unit of the Food and Agriculture Organization of the United Nations (http://www.fao.org/fishery/statistics/en).

153. Eel is accompanied by a price of one obol, five chalks (lines B.31–32), but ΗΠΧ (11 chalks) should perhaps be read for ΙΠΧ (see above, n. 133). Tuna is similarly costly (lines B.4–8), with the price of bluefin belly meat exceeding two obols and even the smaller varieties of tuna selling for more than an obol. Not suprisingly, tuna and eel are the two delicacies most frequently lauded in the literary sources. They are occasionally cited together, as in, e.g., Ar. fr. 380 K-A: οὐκ ἔγχελυν Βοιωτίαν, οὐ γλαῦκον, οὐχὶ θύννου / ὑπογάστριον ("neither a Boiotian eel, nor a glaukos, nor the belly meat of a tuna"). The speaker is perhaps referring specifically to varieties beyond the reach of the poor, as in Eriphos fr. 3 K-A (Athen. 7.302.e): ταῦτα γὰρ οἱ πένητες οὐκ ἔχοντες ἀγοράσαι / ὑπογάστριον θύννακος . . . ("These things the poor cannot afford: the belly meat of the tuna . . .").

154. Rostovtzeff 1941, vol. 2, p. 1177. Rostovtzeff's portrait of the Hellenistic economy, and the role of fishing within it, is in fact far more nuanced than Gallant's caricature allows. In this respect it is hard not to agree that the primitive-modernist approach to these issues obscures more than it reveals: on this point see Saller 2002, pp. 255–256; Bresson 2007, p. 22.

155. Curtis is in error in suggesting that salted fish is "included among sea fish listed in the inscription" (1991, p. 117, n. 24. The entries in B.4–7 do not "divide salted tunny [θουννόκειτος] into three categories" (p. 170); rather they distinguish between the choicest cut and the rest of the bluefin tuna (B.4–6) and smaller varieties of tuna (B.7). One could probably have purchased at Akraiphia ὀρκύνοιο τρίγωνα, triangular pieces of salted bluefin shipped across the Ionian Sea to Greece in amphoras and mentioned in a fragment ascribed to Euthydemos (*Suppl. Hell.* 455, line 12), but for this, one would have visited a ταριχοπώλης, or salt-fish merchant, not the market where fresh fish were sold.

156. Theophrastos (*Char.* 6.9) distinguishes between the markets of fishmongers (τὰ ἰχθυοπώλια) and of purveyors of salt-fish (τὰ ταριχοπώλια). Aristophanes (*Eq.* 1245–1247) confirms the distinction: when Kleon asks the sausage-seller, "But tell me this: were you selling your sausages in the agora or by the gates?", he receives the response, "By the gates, where salt-fish is sold" (Ἐπὶ ταῖς πύλαισιν, οὗ τὸ τάριχος ὤνιον). On the words οὗ τὸ τάριχος ὤνιον the scholiast (1247a) elaborates: ὅπου τὸ ταριχοπωλεῖον, ἀντὶ τοῦ ὅπου τὰ εὐτελῆ πωλεῖται. This location would have been convenient for those living in the countryside, like the rustic described by Theophrastos (*Char.* 4.15), who asks everyone he meets on his way into town about the price of salt-fish, then announces that he plans to pick some up along the road. A designated market for salt-fish (ταριχόπωλις), distinct from the agora, and presumably from the fish market as well, is similarly attested at Chios in a fragment attributed to the 4th-century B.C. sophist Theokritos of Chios (*Gnomologium Vaticanum,* no. 314 Sternbach). The ancient sources preserve a host of terms for those involved in the salt-fish trade, of which the most common is ταριχοπώλης. This typically denotes a retailer (Antiphanes fr. 126 K-A [Athen. 3.120a]; Alexis fr. 15 K-A [Athen. 3.117e]; Lucian *Tox.* 4 and *Vit. auct.* 11; Plut. *Mor.* 631d; cf. the verb ταριχοπωλέω in Plato *Chrm.* 163b7 and Lucian *Menippos* 17), but it is also used to describe well-known Athenian importers (ταριχηγοί) such as Chairephilos, whose services are said to have earned his sons citizenship (Alexis fr. 77 K-A [Athen. 3.119f]; Timokles fr. 23 K-A [Athen. 8.339d]), and Pheidippos (Alexis fr. 221 K-A [Athen. 3.120a–b]).

Hellenistic period confirms the distinction, and Byzantine comparative evidence affords a number of suggestive parallels.[157] Archaeological evidence too suggests that already by the 5th century B.C. at Corinth, as at Pompeii much later, the salt-fish trade was in the hands of merchants operating specialized shops.[158]

In other words, the prices recorded at Akraiphia cannot be used as evidence that poorer Greeks could not afford fish, because the inscription gives little or no information about salted fish and the cheaper varieties of fresh fish. It is thus mistaken to conclude that dinner parties with fish dishes would have been out of the reach of all but the wealthiest citizens. In Attic comedy a passion for seafood is as likely to be expressed by tradesmen or small landholders as by wealthy aristocrats, and the evidence suggests that sympotic culture was by no means exclusive to the upper classes.[159] This helps to explain the apparently widespread phenomenon of dining clubs, which must have served fish often.[160] It is this demand for seafood even by those with restricted means that appears to lie behind another fragment of Diphilos preserved by Athenaios (fr. 31 K-A; Athen. 6.227e–228b), in which one of the speakers would have us believe that customers in the Corinthian fish market were required to pass a property test to ensure that they were not spending beyond their means. The speaker suggests that the law is intended to prevent crime, but he clearly betrays his true concern: such buyers are driving up the price of fish that traditional aristocrats consider an entitlement.[161]

157. E.g., a sacred law from Kos specifies sacrifices to be made by those "holding the contract on incense merchants, beans, and salt-fish" (*Syll.*^{3} 1000, line 15: τοὶ ἔχοντες τὰν ὠνὰν λιβανοπωλᾶν, ὀσπρίων, ταρείχο[υ]). The editors agree that this refers to the owners of contracts to collect certain taxes. The law provides no evidence for the existence of a tax on either fishmongers or fresh fish; rather, it stipulates that the fishmongers, as a class, are responsible for offering sacrifices (line 21: θυόντωι δὲ κα[τὰ τ]|αὐτὰ καὶ (τ)οὶ μετάβολοι τοὶ ἐν τοῖς ἰχ(θ)ύσιν), a fact that suggests the existence of a formal commercial association. (For such associations at Kos, see Waltzing 1899, vol. 3, pp. 64–65.) Other inscriptions indicate that the sale of fresh and salted fish were separate trades and that the dealers were often subject to separate taxes and regulations: in a Hadrianic inscription from Magnesia on the Maeander (*I.Magnesia* 116), for example, a tax is assessed on the sale of salt-fish (ταρειχοπωλίου ἑκατοστή, line 35); a separate tax (ἰχθυικῆς, line 42) is evidently applied to fresh fish. The evidence from papyri (collected in Curtis 1991, pp. 131–141) suggests a similar state of affairs in Graeco-Roman Egypt. The *Book of the Eparch,* a collection of regulations governing the activities of Byzantine commercial associations, specifies that dealers in fresh fish (ἰχθυοπράται) sell their product only in the fish market under the supervision of προστάται; they were legally prohibited from dealing in smoked and salted fish, which was the privilege of general grocers (σαλδαμάριοι), who in turn were prohibited from selling fresh fish (13.1, 17.1–3; ed. Koder 1991). See further *ODB,* pp. 788–789, s.v. fishmonger, and p. 885, s.v. grocer (A. P. Kazhdan).

158. See the convenient summaries of the evidence from Corinth and Pompeii in Curtis 1991, pp. 115 and 90–96, respectively. At Corinth the so-called Punic Amphora Building seems to have been used by a salt-fish dealer in the middle of the 5th century B.C. Roughly 40% of the amphoras found in the building were of a Punic type, suggesting that much of the fish originated in Spain or Morocco; see Williams 1979, pp. 117–118, pl. 46; Koehler 1981, p. 450. The skin and scales of some of these fish, cut into rectangular pieces, have survived: examples are on display in the Corinth Museum (cf. Curtis 1991, pl. 1a). On the *garum* industry at Pompeii, see Étienne and Mayet 1998.

159. See, e.g., Wilkins 1993; 2005, p. 22.

160. The literary evidence suggests that fish routinely appeared on dining club menus: in Phoinikides fr. 5 K-A (Athen. 8.345e), a cook threatens to withhold fish from members of a club who have not paid their dues; in Alexis fr. 15 K-A (Athen. 3.117e), a club member, when asked to pay his share, demands an itemized account that includes fish.

161. Lines 21–23: οὐκ ἔστιν ἰχθυηρὸν ὑπὸ σοῦ μεταλαβεῖν. / συνῆχας ἡμῶν εἰς τὰ λάχανα τὴν πόλιν. περὶ τῶν σελίνων μαχόμεθ' ὥσπερ Ἰσθμίοις. ("Because of you it is not possible to purchase anything fishlike, but you have pushed our whole city into the vegetable market and we fight over celery as if at Isthmia!") The alleged link between the purchase of fish and crime is also the subject of a fragment of Alexis (fr. 78 K-A; Athen. 6.227d–e).

FIGHTING OVER FISH? IDEOLOGY IN THE MARKETPLACE

I have suggested that the prices recorded in the inscription from Akraiphia could have been intended in part to prevent price-gouging by fishmongers in periods of shortage or increased demand. Passages such as the fragment of Diphilos (fr. 31 K-A) just discussed, which can be interpreted as a reaction against competition in the fish market, indicate that these price limits should be understood within a broader cultural context.

Vatin, citing the fragmentary but apparently similar measure from Delphi, argues that the Akraiphian decree was intended to prevent fishmongers from taking advantage of visitors to the Ptoia, which is consistent with the view that regulatory measures of this kind were primarily a phenomenon of religious sanctuaries and the poleis that controlled them.[162] The inscription, however, does not mention the sanctuary or the Ptoia festival, which would have brought crowds to Akraiphia only for a week or two in late August. As even Vatin concedes, the sanctuary of Apollo Ptoios could never have attracted a stream of visitors comparable to those who visited Delphi.[163]

A balanced assessment of the evidence, some of which has been presented above, suggests instead that regulations on sale, including occasional attempts to control prices, were a normal feature of the civic economy. This point is stressed by Bresson in his republication of a 1st-century B.C. price list from Piraeus.[164] This document, which clearly has nothing to do with religious matters, establishes maximum prices for various secondary delicacies traditionally sold by tripe butchers, but tellingly refrains from fixing a maximum price for beef or pork. It is aimed at the peripheral products, where the profiteering of butchers might reasonably be controlled. In this respect it is similar to the many ancient regulations that deal specifically with the sale of fish.[165] For the most part, tackling the larger problem

162. See Vatin 1971, p. 109; Gallant 1985, p. 39; Wörrle 1988, p. 215, n. 84; Curtis 1991, p. 170; Davidson 1997, p. 187; Migeotte 1997.

163. Vatin 1971, p. 109. Pausanias (9.23.6) gives the distance from Akraiphia to the sanctuary of Apollo as 15 stades, a fair estimate.

164. Bresson 2000a, which includes a reconstruction of the text and a detailed discussion of its meaning, supersedes the *editio princeps,* Steinhauer 1994 (*BullÉp* 1995, 252), while incorporating a number of valuable suggestions from Descat 1997. See also the minor clarifications in Bresson 2008, pp. 42–43. On the inscription from Akraiphia in particular, Bresson concludes (2000a, pp. 175–176, n. 110): "Rien n'oblige donc à considérer que le tarif des poissons ne s'appliquait que lors des *Ptoia.* Le parallèle qui en a été tiré pour la liste de Delphes tombe de la même manière. N'est-ce pas plutôt l'action des agoranomes d'Athènes et de Pergame qui peut fournir un parallèle au texte d'Akraiphia?"

165. In addition to those discussed above, we might include in this category a law attested in a fragment of Xenarchos (fr. 7 K-A, lines 6–7; Athen. 6.225c–d), which supposedly prevented fishmongers from watering their wares: ἐπεὶ γὰρ αὐτοῖς οὐκέτ' ἔστ' ἐξουσία / ῥαίνειν, ἀπείρηται δὲ τοῦτο τῶι νόμωι ("Since it is not permitted for them to water [the fish]; indeed, this is prohibited by the law"). Most fish are between 80% and 85% water by weight, and fishmongers no doubt wished to keep them wet in order to prevent their investment from evaporating. Davidson (1997, p. 198) suggests that the law is "likely fictitious . . . the imagined consequence in all probability of some fantastic scenario, a water shortage caused by clouds on strike, perhaps." This is certainly possible, but perhaps the law was intended to prevent fishmongers from deceiving their customers about the freshness of their merchandise. A fragment of Antiphanes remarks on the state in which many fish were sold (fr. 159 K-A, lines 1–7; Athen. 6.227e): οὐκ ἔστιν οὐδὲν θηρίον τῶν ἰχθύων / ἀτυχέστερον· τῶι μὴ γὰρ ἀποχρῆν ἀποθανεῖν / αὐτοῖς ἁλοῦσιν, εἶτα κατεδηδεσμένοις / εὐθὺς ταφῆναι, παραδοθέντες ἄθλιοι / τοῖς ἰχθυοπώλαις τοῖς κακῶς ἀπολουμένοις / σήπονθ', ἕωλοι κείμενοι δύ' ἡμέρας / ἢ τρεῖς. ("No creature is more unfortunate than fish, for it is not sufficient for them once captured simply to die and then be straightaway eaten and buried. Instead they are given over as prizes to those damned fishmongers and they rot; already a day old, they sit there for two or three.")

of supply was beyond the power of *agoranomoi,* who focused instead on preventing "abuses" by retailers. Most often these measures stopped well short of establishing fixed prices.

On the other hand, it is not entirely surprising to discover that more aggressive measures were occasionally tried, as seems to have been the case at Delphi and Akraiphia, or that a surprisingly high proportion of our attested ancient price measures are specifically concerned with fish. As Bresson notes, such measures were perhaps more likely to succeed when applied to a perishable product like seafood.[166] Fishermen did not necessarily have the luxury of choosing markets. Not every variety of fish was suitable for preserving, and the considerable investment in labor and raw materials required to preserve them ensured that, whenever possible, fish was marketed fresh.

Bresson also suggests that, because of the low social status of fishermen and fishmongers, civic officials need not have held them in the same regard as producers and distributors of commodities such as grain. The issue of class is extremely important, and it may be relevant to the inscription from Akraiphia, although I suspect that it is considerably more complicated than a simple disparity of status between fisherman or fishmonger and civic officials. The complexity of the issue has been demonstrated by Davidson, who explores some of the intricate and often competing ideologies that intersect with unusual frequency in ancient discussions of fish.[167]

Feyel viewed the inscription from Akraiphia as a concrete example of the demagoguery criticized by Polybios (20.6), who asserts that certain *strategoi* of the Boiotian League even took to providing disbursements to the poor.[168] As I have argued above, however, it is unlikely, given its civic nature, that the Akraiphian decree was a product of federal demagoguery. Still, one might argue that these measures could have been motivated by a local demagogue catering to "poor" Akraiphians who were clamoring for cheaper fish. In support of this idea it is tempting to adduce another criticism offered by Polybios (20.6.5–6), that the Boiotians, having forgotten their formerly proud and austere character, chiefly spent their time and resources glutting themselves:

> τούτοις δ' ἠκολούθησε καὶ ἕτερος ζῆλος οὐκ εὐτυχής. οἱ μὲν γὰρ ἄτεκνοι τὰς οὐσίας οὐ τοῖς κατὰ γένος ἐπιγενομένοις τελευτῶντες ἀπέλειπον, ὅπερ ἦν ἔθος παρ' αὐτοῖς πρότερον, ἀλλ' εἰς εὐωχίας καὶ μέθας διετίθεντο καὶ κοινὰς τοῖς φίλοις ἐποίουν· πολλοὶ δὲ καὶ τῶν ἐχόντων γενεὰς ἀπεμέριζον τοῖς συσσιτίοις τὸ πλεῖον μέρος τῆς οὐσίας, ὥστε πολλοὺς εἶναι Βοιωτῶν οἷς ὑπῆρχε δεῖπνα τοῦ μηνὸς πλείω τῶν εἰς τὸν μῆνα διατεταγμένων ἡμερῶν.
>
> Attendant upon all of this was another unfortunate passion. Men dying childless were leaving their property not to their relatives, as was formerly customary among them, but bequeathing it for feasts and drinking and making it common property among friends. And many even of those with families left the larger share of their property to their dining clubs, so that there were many Boiotians for whom there were more feasts each month than days appointed to the month.

166. Bresson 2000a, p. 177.

167. Davidson 1997.

168. Feyel 1936, p. 36. Polybios (20.6.2–4) singles out a certain Opheltas as the worst offender: ἔνιοι δὲ τῶν στρατηγῶν καὶ μισθοδοσίας ἐποίουν ἐκ τῶν κοινῶν τοῖς ἀπόροις τῶν ἀνθρώπων . . . Ὀφέλτας, αἰεί τι προσεπινοῶν ὃ κατὰ τὸ παρὸν ἐδόκει τοὺς πολλοὺς ὠφελεῖν, μετὰ δὲ ταῦτα πάντας ἀπολεῖν ἔμελλεν ὁμολογουμένως.

Historians tend to argue over the veracity of Polybios's critique on its own terms.[169] In my view, however, this diatribe is most interesting for its familiarity. The Boiotians have traded their former rugged simplicity and attendant values for fashionable tastes and the pursuit of pleasure. These are the usual clichés of the conservative social critic. The underlying concerns, however, are the same issues of class and ethics of monetary exchange that lie behind Aristotle's discussion of what he called ἡ κτητικὴ χρεματιστικὴ τέχνη.[170]

I do not mean to suggest that the dominant economic mode in Hellenistic Boiotia involved anything other than traditional agricultural production. As Aristotle's discussion makes clear, however, other means of generating, accumulating, and endowing wealth were increasing in importance already in the 4th century B.C., and the resulting cultural tensions are reflected in the reactionary biases found in a wide range of literary texts. Much of this economic activity involved market exchange, and while it may not have generated great affluence for any significant percentage of the population, it did give rise to a class of individuals who measured much of their property in movable wealth, including coin. Unconcerned by quaint notions about self-sufficiency (narrowly defined), they were happy to spend it.

This relationship between trade and the demand for fresh fish is perhaps best illustrated by the accounts from Hellenistic Delos, where the revenues from a tithe on fish indicate that by the middle of the 3rd century B.C., the island's residents were consuming fresh fish in considerable quantities.[171] Indeed, the accounts suggest a direct correlation between the increasing consumption of seafood and the island's growing population of resident foreigners.[172] By the early 2nd century B.C., this vibrant dynamic of trade and consumption at Delos had even attracted the special attention of parasites, if we believe a fragment of the comic poet Kriton in which a parasite abandons Piraeus for greener Delian pastures, "having heard that this place alone possessed three ideal qualities for the parasite: a market rich in fish, a spendthrift throng, and the Delians, themselves parasites of Apollo."[173]

169. On the treatment of Boiotian history by Polybios, see Feyel 1942a.

170. Arist. *Pol.* 1256b40–41. On this passage and Aristotle's attitudes toward trade, see especially Bresson 2000d.

171. I treat this evidence in detail in Lytle, forthcoming. An account from 250 B.C. records revenues from an ἰχθύων δεκάτη of 1,850 drachmas (*IG* XI 2 287, line 9). In order to recover this sum plus the additional 5% surcharge on the value of the bid, and allowing for profit and the additional costs involved in collecting the duty, the tax farmer entrusted with the contract must have envisioned collecting duties on fish valued well in excess of 20,000 drachmas.

172. Revenues from a tithe assessed on rents appear in the accounts of 279 (*IG* XI 2 161, line A.26), 274 (*IG* XI 2 199, line A.16), and 250 B.C. (*IG* XI 2 287, line 9). As Reger notes (1994, p. 256), even if Homolle's estimates of the precise number of resident foreigners (1890, pp. 440–441) are unreliable, the figures given in the accounts can be used to estimate the total number of rented domiciles. Given that rents in the first half of the 3rd century appear to have remained remarkably stable, the increase in the amount of the tithe between the 270s and 250 B.C. suggests a corresponding increase of some 280% in the number of rented domiciles. It is presumably not a coincidence that the revenues recorded for the ὑποτρόπιον or ἰχθύων δεκάτη (the two are probably identical: Homolle 1890, p. 442) increased by approximately the same percentage over the same period.

173. Fr. 3 K-A (Athen. 4.173b), lines 4–8: εἰς Δῆλον ἐλθεῖν ἠθέλησ' ἐκ Πειραιῶς / πάντων ἀκούων διότι παρασίτωι τόπος / οὗτος τρία μόνος ἀγαθὰ κεκτῆσθαι δοκεῖ, / εὔοψον ἀγοράν, †παντοδαπαν οὐκουντ' ὄχλον, / αὐτοὺς παρασίτους τοῦ θεοῦ τοὺς Δηλίους.

Delos is in many respects unique, and while there is no evidence of conflict between merchants and citizens on the island, in other Hellenistic poleis commercial growth sometimes led to tensions, as Gary Reger has demonstrated.[174] Reger highlights some of the issues using a passage of Aineias the Tactician (29.1–10), which describes the capture of a city after weapons hidden in the wares of merchants were smuggled into the hands of conspirators. The moral is clear: in the Hellenistic polis the merchant, whether citizen or foreigner, represented a potentially destabilizing force.

Seafood occupied an especially problematic ideological space, in part because its consumption stood largely outside the aristocratic ideals of the self-sufficient οἶκος and the traditional economy of gift-exchange. Its purchase involved competition mediated not by class but by price, and in this competition an aristocrat had no inherent advantage over a resident foreigner or a cook buying on behalf of a dining club. In my view, the cultural tensions arising from the friction between these different economic modes and their associated ideologies lie at the heart of both Polybios's diatribe against the proliferation of dining clubs in Hellenistic Boiotia and Diphilos's humorous account of the Corinthian measures aimed at restricting access to the fish market. In Diphilos's Corinth, maintaining the rule of law is merely a pretext. Access to the market is said to be dependent on a test of means: "if a person has property, the proceeds from it should be sufficient to meet his obligations" (κἂν μὲν οὐσίαν ἔχῃ / ἧς αἱ πρόσοδοι λύουσι τἀναλώματα, / ἐᾶν ἀπολαύειν τοῦτον ἤδη τὸν βίον, fr. 31 K-A, lines 4–6; Athen. 6.227e–228b). But what, exactly, does this mean? How narrowly are "property" and "proceeds" to be defined? Who, in actual practice, would have been excluded from the marketplace by these property qualifications?

After quoting the passage by Diphilos, Athenaios remarks (6.228b; fr. 2 K-A), "Sophilos, in his *Androkles,* thinks the same practice ought to be adopted among the Athenians, suggesting that two or three fish-market inspectors be selected by the council" (τὸ δὲ ἔθος τοῦτο καὶ Ἀθήνησιν εἶναι ἀξιοῖ Σώφιλος ἐν Ἀνδροκλεῖ ὀψονόμους ἀξιῶν αἱρεῖσθαι ὑπὸ τῆς βουλῆς δύ' ἢ καὶ τρεῖς). There is no evidence to suggest that such timocratic measures were ever seriously considered at Athens, where the availability of goods in the market, and the right to compete freely for them, was often strongly identified with democratic ideology.[175] On the other hand, the setting of maximum prices could always be justified as an attempt to protect the *demos.* When introduced into previously unregulated fish markets, however, such measures may have had less obvious consequences,

174. Reger 2003, esp. pp. 165–171.

175. In a fragment from Antiphanes' comedy *The Wealthy,* the speaker, frustrated by the slim pickings available on the fishmongers' tables, urges the state to protect the supply of fish (fr. 188 K-A, lines 14–19; Athen. 8.342–343a): τί οὖν ὄφελος τῶν νησιαρχῶν; ἔστι δὴ / νόμωι κατακλεῖσαι τοῦτο, παραπομπὴν ποιεῖν / τῶν ἰχθύων. νυνδὶ Μάτων συνήρπακεν / τοὺς ἁλιέας, καὶ ⟨δὴ⟩ Διογείτων νὴ Δία / ἅπαντας ἀναπέπεικεν ὡς αὐτὸν φέρειν, / κοὐ δημοτικόν γε τοῦτο δρᾶι τοιαῦτα φλῶν. ("Indeed, what good are the νησιάρχαι? It ought to be possible to secure it by law, to make a convoy for the fish. For now Maton co-opts all the fishermen, and Diogeiton, by god, is bribing them all in order that he himself can bear it off, and it is simply not democratic, his devouring so much.") It is not merely the excessive consumption of Maton and Diogeiton that he rails against, but the fact that their actions subvert the fair and open functioning of the market.

including perhaps the need for rationing or other restrictions on sales.[176] Similarly, by controlling the incentive for profit among fishmongers, it is possible that such measures could have tilted the playing field back in favor of the well-connected: even at Athens we find some evidence for the continued existence of a parallel economy, of fish circumventing the market and finding its way directly into the hands of aristocrats.[177]

If we are to imagine an underlying social tension at Akraiphia, it is not likely to have been between the wealthy and the abject poor, who could never have afforded to spend what little bronze they had at the tripe-butcher or the fish market, and for whom fixed maximum prices, even reasonable ones, can have made little difference.[178] The conflict is more likely to have been between traditional landed elites and those participating in and profiting from various forms of market exchange. In other words, demagoguery probably had little to do with this decree. In fact, we might reasonably ask whether the assembly had any meaningful role at all in formulating the document. Bresson is justifiably skeptical of the idea that the assembly took an active role in determining the prices; he suspects instead that the list was prepared by the market officials themselves.[179] As noted above, one of these men, Hiarokleis, may also have served as polemarch, and he probably belonged to a prominent Akraiphian family. There is no reason to suspect that his colleagues, Aminias and Dikaios, would have had any particular affinities for "the poor" either.

Rostovtzeff long ago remarked in passing that "[a]n interesting sidelight is thrown on the economic conditions of Boiotia by a curious inscription from Acraephia."[180] I trust that by now the "wilderness" in the title of this article will be recognized as deliberately tongue-in-cheek. The paucity of literary sources either from or about Boiotia, especially during the Hellenistic period, is an unfortunate reality. It is not in any way suggestive of Boiotian reality, however, which was deeply embedded in a host of connected regional and interregional social and economic contexts. I have attempted to illustrate some of the ways in which these contexts meet in a single document from Akraiphia, with the hope that it will now be seen as a great deal more than a mere sidelight on the economic conditions of Boiotia.

176. It is tempting to imagine that some kind of price controls are behind an amusing story related by Strabo (14.2.21 [C 658]) about a poet at Iasos whose audience listens in rapt attention until the moment the bell rings to announce the opening of the fish market, at which point the theater is promptly abandoned.

177. See, e.g., Antiphanes, fr. 188 K-A (cited above, n. 175). In a letter of Alkiphron (1.9) the fisherman Aigialeus writes to the parasite Struthion that he hopes to avoid "the sharp hand of the *agoranomoi*" (τῆς πικρᾶς τῶν ἀγορανόμων . . . χειρός). He asks Struthion to serve as his intermediary (διὰ σοῦ προξένου) and introduce him to one of his wealthy aristocratic friends (τῶν λακκοπλούτων, a phrase obviously recalling Kallias). In return for fresh fish he will receive not only cash but also "some consolation" (τις παραμυθία) during the Dionysia and the Apaturia festivals, a clear allusion to the traditional economy of gift exchange.

178. Bresson 2000a, pp. 179–181.

179. Bresson 2000a, p. 174, n. 103.

180. Rostovtzeff 1941, vol. 3, p. 1369, n. 35.

REFERENCES

Andreades, A. M. 1933. *A History of Greek Public Finance,* trans. C. N. Brown, rev. ed., Cambridge, Mass.

Anthonioz, R. 1967. "Les Imraguen, pêcheurs nomades de Mauritanie (El Memghar)," *Bulletin de l'IFAN* 29, pp. 695–738.

———. 1968. "Les Imraguen, pêcheurs nomades de Mauritanie (El Memghar) (2ème partie)," *Bulletin de l'IFAN* 30, pp. 751–768.

Apostolides, N. C. 1883. *La pêche en Grèce: Ichthyologie, migrations, engins et manières de pêche, produits, statistique, et législation,* Athens.

———. 1907. *La pêche en Grèce,* 2nd ed., Athens.

Arenz, A. 2006. *Herakleides Kritikos "Über die Städte in Hellas": Eine Periegese Griechenlands am Vorabend des Chremonideischen Krieges* (Quellen und Forschungen zur Antiken Welt 49), Munich.

Arnott, W. G. 1996. *Alexis: The Fragments. A Commentary* (Cambridge Classical Texts and Commentaries 31), Cambridge.

Ballard, R. D., A. M. McCann, D. Yoerger, L. Whitcomb, D. Mindell, H. Oleson, H. Singh, B. Foley, J. Adams, D. Piechota, and C. Giangrande. 2000. "The Discovery of Ancient History in the Deep Sea Using Advanced Deep Submergence Technology," *Deep-Sea Research,* Part I: *Oceanographic Research Papers* 47, pp. 1591–1620.

Ballard, R. D., L. E. Stager, D. Master, D. Yoerger, D. Mindell, L. L. Whitcomb, H. Singh, and D. Piechota. 2002. "Iron Age Shipwrecks in Deep Water off Ashkelon, Israel," *AJA* 106, pp. 151–168.

Barrington Atlas = R. J. A. Talbert, ed., *Barrington Atlas of the Greek and Roman World,* Princeton 2000.

Bechtel, F. 1917. *Die historischen Personennamen des Griechischen bis zur Kaiserzeit,* Halle.

Becker, W. A. 1878. *Charikles: Bilder altgriechischer Sitte, zur genaueren Kenntniss des griechischen Privatlebens* 2, rev. by H. Göll, Berlin.

Bekker-Nielsen, T. 2002a. "Fish in the Ancient Economy," in *Ancient History Matters: Studies Presented to Jens Erik Skydsgaard on His Seventieth Birthday* (*AnalRom* 30), ed. K. Ascani, V. Gabrielsen, K. Kvist, and A. H. Rasmussen, Rome, pp. 29–37.

———. 2002b. "Nets, Boats, and Fishing in the Roman World," *ClMed* 53, pp. 215–233.

Bintliff, J. L. 1977. *Natural Environment and Human Settlement in Prehistoric Greece: Based on Original Fieldwork* (*BAR* Suppl. 28), Oxford.

Bresson, A. 2000a. "L'inscription agoranomique du Pirée et le contrôle des prix de détail en Grèce ancienne," in A. Bresson, *La cité marchande* (Scripta Antiqua 2), Bordeaux, pp. 151–182.

———. 2000b. "L'attentat d'Hiéron et le commerce grec," in A. Bresson, *La cité marchande* (Scripta Antiqua 2), Bordeaux, pp. 131–149 (= *Economie antique: Les échanges dans l'antiquité: Le rôle de l'État* [Entretiens d'archéologie et d'histoire 1], ed. P. Briant, R. Descat, and J. Andreau, Saint-Bertrand-de-Comminges 1994, pp. 47–68).

———. 2000c. "Prix officiels et commerce de gros à Athènes," in A. Bresson, *La cité marchande* (Scripta Antiqua 2), Bordeaux, pp. 183–210.

———. 2000d. "Aristote et le commerce extérieur," in A. Bresson, *La cité marchande* (Scripta Antiqua 2), Bordeaux, pp. 109–130 (= *RÉA* 89, 1987, pp. 217–238).

———. 2007. *L'économie de la Grèce des cités (fin VI^e^–I^er^ siècle a.C.)* 1: *Les structures et la production,* Paris.

———. 2008. *L'économie de la Grèce des cités (fin VI^e^–I^er^ siècle a.C.)* 2: *Les espaces de l'échange,* Paris.

Briant, P., and R. Descat. 1998. "Un registre douanier de la satrapie d'Égypte à l'époque achéménide," in *Le commerce en Égypte ancienne* (*BIFAO* 121), ed. N. Grimal and B. Menu, Cairo, pp. 59–104.

Brun, P. 1996. *Les archipels égéens dans l'antiquité grecque (V^e^–II^e^ siècles av. notre ère)* (Centre de recherches d'histoire ancienne 157), Paris.

Buck, C. D., and F. B. Tarbell. 1889. "Discoveries at Anthedon in 1889," *AJA* 5, pp. 443–460.

Busolt, G. 1920. *Griechische Staatskunde* 1 (Handbuch der Altertumswissenschaft 4.1.1), Munich.

Chandezon, C. 2003. *L'élevage en Grèce (fin V^e–fin I^er s. a.C.): L'apport des sources épigraphiques* (Scripta Antiqua 5), Bordeaux.

Chaniotis, A. 1996. *Die Verträge zwischen kretischen Poleis in der hellenistischen Zeit* (Heidelberger althistorische Beiträge und epigraphischen Studien 24), Stuttgart.

Chantraine, P. 1977. *Dictionnaire étymologique de la langue grecque: Histoire des mots* 4.1: *(Π–Υ),* Paris.

Collin-Bouffier, S. 2008. "Le poisson dans le monde grec, mets d'élites?" in *Pratiques et discours alimentaires en Méditerranée de l'antiquité à la Renaissance. Actes du 18^e colloque de la Villa Kérylos à Beaulieu-sur-Mer les 4, 5, et 6 octobre 2007* (Cahiers de la Villa Kérylos 19), ed. J. Leclant, A. Vauchez, and M. Sartre, Paris, pp. 91–121.

Corsten, T. 1999. *Vom Stamm zum Bund: Gründung und territoriale Organisation griechischer Bundesstaaten* (Studien zur Geschichte Nordwest-Griechenlands 4), Munich.

Crivelli, A. J. 1995. "Are Fish Introductions a Threat to Endemic Freshwater Fishes in the Northern Mediterranean Region?" *Biological Conservation* 72, pp. 311–319.

Curtis, R. I. 1991. *Garum and Salsamenta: Production and Commerce in Materia Medica* (Studies in Ancient Medicine 3), Leiden.

Daly, L. W. 1967. *Contributions to a History of Alphabetization in Antiquity and the Middle Ages* (*CollLatomus* 90), Brussels.

Davidson, A. 2002. *Mediterranean Seafood: A Comprehensive Guide with Recipes,* 3rd ed., Berkeley.

Davidson, J. 1993. "Fish, Sex, and Revolution in Classical Athens," *CQ* 43, pp. 53–66.

———. 1997. *Courtesans and Fishcakes: The Consuming Passions of Classical Athens,* London.

Dawkins, R. M., ed. 1929. *The Sanctuary of Artemis Orthia at Sparta, Excavated and Described by Members of the British School at Athens, 1906–1910* (*JHS* Suppl. 5), London.

De Laet, S. J. 1949. *Portorium: Étude sur l'organisation douanière chez les Romains, surtout à l'époque du haut-empire,* Bruges.

Descat, R. 1997. "Les prix dans l'inscription agoranomique du Pirée," in *Économie antique: Prix et formation des prix dans les économies antiques* (Entretiens d'archéologie et d'histoire 3), ed. J. Andreau, P. Briant, and R. Descat, Saint-Bertrand-de-Comminges, pp. 13–20.

Devedjian, K. 1926. *Pêche et pêcheries en Turquie,* Istanbul.

Dillon, M. J. P. 1994. "The Didactic Nature of the Epidaurian Iamata," *ZPE* 101, pp. 239–260.

Dumont, J. 1977a. "La pêche dans le Fayoum hellénistique: Traditions et nouveautés d'après le Papyrus Tebtynis 701," *ChrÉg* 52, pp. 125–142.

———. 1977b. "Liberté des mers et territoire de pêche en droit grec," *Revue historique de droit français et étranger* 55, pp. 53–57.

Economidis, P. S. 1972–1973. "Κατάλογος τῶν ἰχθύων τῆς Ἑλλάδος," *Hellenic Oceanology and Limnology* 11, pp. 421–598.

Edel, E. 1961. *Zu den Inschriften auf den Jahreszeitenreliefs der "Weltkammer" aus dem Sonnenheiligtum des Niuserre* 1 (*GöttNachr* 1961.8), Göttingen.

Efstratiou, N. 1985. *Agios Petros, a Neolithic Site in the Northern Sporades: Aegean Relationships during the Neolithic of the 5th Millennium* (*BAR-IS* 241), Oxford.

Étienne, R., and D. Knoepfler. 1976. *Hyettos de Béotie et la chronologie des archontes fédéraux entre 250 et 171 avant J.-C.* (*BCH* Suppl. 3), Paris.

Étienne, R., and F. Mayet. 1998. "Le *garum* à Pompéi: Production et commerce," *RÉA* 100, pp. 199–215.

Étienne, R., and L. Migeotte. 1998. "Colophon et les abus des fermiers des taxes," *BCH* 122, pp. 143–157.

Étienne, R., and P. Roesch. 1978. "Convention militaire entre les cavaliers d'Orchomène et ceux de Chéronée," *BCH* 102, pp. 359–374.

Faber, G. L. 1883. *The Fisheries of the Adriatic and the Fish Thereof: A Report of the Austro-Hungarian Sea-Fisheries, with a Detailed Description of the Marine Fauna of the Adriatic Gulf,* London.

Feyel, M. 1936. "Nouvelles inscriptions d'Akraiphia," *BCH* 60, pp. 11–36.

———. 1942a. *Polybe et l'histoire de Béotie au III^e siècle avant notre ère,* Paris.

———. 1942b. *Contribution à l'épigraphie béotienne* (Publications de la Faculté des lettres de l'Université de Strasbourg 95), Le Puy.

Finley, M. I. 1952. *Studies in Land and Credit in Ancient Athens, 500–200 B.C.: The Horos-Inscriptions,* New Brunswick.

Firth, R. 1966. *Malay Fishermen: Their Peasant Economy,* 2nd ed., London.

FishBase = R. Froese and D. Pauly, eds., *FishBase,* http://www.fishbase.org, version 03/2010 (accessed May 1, 2010).

Fossey, J. M. 1979. "The Cities of the Kopaïs in the Roman Period," *ANRW* II.7.1, pp. 549–591.

———. 1988. *Topography and Population of Ancient Boiotia* 1, Chicago.

Foucher, L. 1960. *Inventaire des mosaïques, feuille no. 57 de l'Atlas archéologique: Sousse,* Tunis.

Fraser, T. M. 1960. *Rusembilan: A Malay Fishing Village in South Thailand,* Ithaca.

———. 1966. *Fishermen of South Thailand: The Malay Villagers,* New York.

Frisk, H. 1970. *Griechisches etymologisches Wörterbuch* 2: *(Κρ–Ω),* Heidelberg.

Froehner, W. 1875. *Mélanges d'épigraphie et d'archeologie,* Paris.

Gabrielsen, V. 2001. "Economic Activity, Maritime Trade, and Piracy in the Hellenistic Aegean," *RÉA* 103, pp. 219–240.

Gallant, T. W. 1985. *A Fisherman's Tale: An Analysis of the Potential Productivity of Fishing in the Ancient World,* Ghent.

———. 1991. *Risk and Survival in Ancient Greece: Reconstructing the Rural Domestic Economy,* Stanford.

Garlan, Y. 1974. "Études d'histoire militaire et diplomatique IX: Recherches sur les fortifications d'Akraiphia," *BCH* 98, pp. 95–112.

Gauthier, P. 1977. "Les ventes publiques de bois et de charbon: À propos d'une inscription de Délos," *BCH* 101, pp. 203–208.

Georgacas, D. J. 1978. *Ichthyological Terms for the Sturgeon and Etymology of the International Terms Botargo, Caviar, and Congeners: A Linguistic, Philological, and Culture-Historical Study* (Πραγματεία της Ακαδημίας Αθηνών 43), Athens.

———. 1982. *A Graeco-Slavic Controversial Problem Reexamined: The -ITΣ- Suffixes in Byzantine, Medieval, and Modern Greek: Their Origin and Ethnological Implications* (Πραγματεία της Ακαδημίας Αθηνών 47), Athens.

Goetz, G., ed. 1892. *Corpus Glossariorum Latinorum* 3, Leipzig.

Gow, F., and D. L. Page. 1965. *The Greek Anthology: Hellenistic Epigrams,* Cambridge.

Gullath, B. 1982. *Untersuchungen zur Geschichte Boiotiens in der Zeit Alexanders und der Diadochen,* Frankfurt.

Hansen, M. H. 1983. "Rhetores and Strategoi in Fourth-Century Athens," *GRBS* 24, pp. 151–180.

Heisserer, A. J. 1980. *Alexander the Great and the Greeks: The Epigraphic Evidence,* Norman.

Hoffman, H. A., and D. S. Jordan. 1892. "A Catalogue of the Fishes of Greece, with Notes on the Names Now in Use and Those Employed by Classical Authors," *Proceedings of the Academy of Natural Sciences of Philadelphia* 1892, pp. 230–285.

Holleaux, M. 1938. "Sur une inscription de Thèbes," in *Études d'epigraphie et d'histoire grecques* 1, Paris, pp. 1–40.

Homolle, T. 1890. "Comptes et inventaires des temples déliens en l'année 279," *BCH* 14, pp. 389–511.

Höppener, H. 1931. *Halieutica: Bijdrage tot de Kennis der oud-griekse Visscherij,* Amsterdam.

Horsley, G. H. R. 1989. "A Fishing Cartel in First Century Ephesos," in *New Documents Illustrating Early Christianity* 5: *Linguistic Essays,* ed. G. H. R. Horsley, Sydney, pp. 95–114.

Hughes, J. P., and R. G. Wasson. 1947. "The Etymology of Botargo," *AJP* 68, pp. 414–418.

Hultsch, F. 1882. *Griechische und römische Metrologie,* 2nd ed., Berlin.

Ideler, J. L., ed. [1841] 1965. *Physici et medici Graeci minores,* vol. 1, repr. Amsterdam.

I.Délos = F. Durrbach, P. Roussel, M. Launey, A. Plassart, and J. Coupry, eds., *Inscriptions de Délos,* 7 vols., Paris 1926–1972.

I.Eph. = H. Wankel, ed., *Die Inschriften von Ephesos* Ia (IGSK 11.1), Bonn 1979.

I.Iasos = W. Blümel, ed., *Die Inschriften von Iasos* I (IGSK 28.1), Bonn 1985.

I.Magnesia = O. Kern, ed., *Die Inschriften von Magnesia am Maeander,* Berlin 1900.

I.Mylasa = W. Blümel, ed., *Die Inschriften von Mylasa* I: *Inschriften der Stadt* (IGSK 34), Bonn 1987.

I.Stratonikeia = M. Ç. Şahin, ed., *Die Inschriften von Stratonikeia* II.1: *Lagina, Stratonikeia, und Umgebung* (IGSK 22.1), Bonn 1982.

I.Tralleis = F. B. Poljakov, *Die Inschriften von Tralleis und Nysa* I: *Die Inschriften von Tralleis* (IGSK 36.1), Bonn 1991.

Jameson, M. H., C. N. Runnels, and T. H. van Andel. 1994. *A Greek Countryside: The Southern Argolid from Prehistory to the Present Day,* Stanford.

Jardé, A., and M. Laurent. 1902. "Inscriptions de la Grèce du Nord," *BCH* 26, pp. 322–398.

K-A = R. Kassel and C. Austin, *Poetae comici graeci,* 8 vols., Berlin 1983–2001.

Kalcyk, H. 1988. "Der Damm von Akraiphia: Landsicherung und Landgewinnung in der Bucht von Akraiphia am Kopaissee in Böotien, Griechenland," *Boreas* 11, pp. 5–14.

Keimer, L. 1938–1939. "La boutargue dans l'Égypte ancienne," *BIÉ* 21, pp. 215–243.

Keramopoullos, A. D. 1931–1932. "Ἐπιγραφαὶ Θεσπιῶν," *ArchDelt* 14, pp. 12–40.

Knoepfler, D. 1986. "Inscriptions de la Béotie orientale II: Anthédon," in

Studien zur alten Geschichte: Siegfried Lauffer zum 70. Geburtstag am 4. August 1981 dargebracht von Freunden, Kollegen, und Schülern 2 (Historica 2), ed. H. Kalcyk, B. Gullath, and A. Graeber, Rome, pp. 593–630.

———. 1992. "Sept années de recherches sur l'épigraphie de la Béotie (1985–1991)," *Chiron* 22, pp. 411–503.

———. 2001. "La réintégration de Thèbes dans le *Koinon* béotien après son relèvement par Cassandre, ou les surprises de la chronologie épigraphique," in *Recherches récentes sur le monde hellénistique. Actes du colloque international organisé à l'occasion du 60e anniversaire de Pierre Ducrey, Lausanne, 20–21 novembre 1998* (Echo 1), ed. R. Frei-Stolba and K. Gex, Bern, pp. 11–26.

———. 2002. "Oropos et la Confédération béotienne à la lumière de quelques inscriptions 'revisitées,'" *Chiron* 32, pp. 119–155.

Koder, J., ed. 1991. *Das Eparchenbuch Leons des Weisen* (Corpus Fontium Historiae Byzantinae: Series Vindobonensis 33), Vienna.

Koehler, C. G. 1981. "Corinthian Developments in the Study of Trade in the Fifth Century," *Hesperia* 50, pp. 449–458.

Lacroix, L. 1938. "Une liste de noms de poissons dans une inscription béotienne," in *Mélanges Emile Boisacq* 2 (Annuaire de l'Institute de philologie et d'histoire orientales et slaves 6), Brussels, pp. 49–56.

Lauffer, S., ed. 1971. *Diokletians Preisedikt* (Text und Kommentare 5), Berlin.

———. 1980. "Inschriften aus Boiotien (II)," *Chiron* 10, pp. 161–182.

Le Bas, P., and W. H. Waddington. 1870. *Inscriptions grecques et latines receuillies en Grèce et en Asie Mineure,* Paris.

LGPN II = M. J. Osborne and S. G. Byrne, *A Lexicon of Greek Personal Names* II: *Attica,* Oxford 1994.

Lytle, E. 2007a. "Fishless Mysteries or High Prices at Athens? Re-examining *IG* II² 1103," *MusHelv* 64, pp. 100–111.

———. 2007b. "The Delian Purple and the *lex portus Asiae*," *Phoenix* 61, pp. 247–269.

———. Forthcoming. "'Entirely Ignorant of the Agora' (Alciphron 1.14.3): Fishing and the Economy of Hellenistic Delos," in *Belonging and Isolation in the Hellenistic World,* ed. S. Ager and R. Faber, Toronto.

Macro, A. D. 1976. "Imperial Provisions for Pergamum: *OGIS* 484," *GRBS* 17, pp. 169–179.

Magnetto, A., ed. 1997. *Gli arbitrati interstatali greci* 2, Pisa.

Marcus, J. 1987a. *Late Intermediate Occupation at Cerro Azul, Perú: A Preliminary Report* (University of Michigan Museum of Anthropology Technical Report 20), Ann Arbor.

———. 1987b. "Prehistoric Fishermen in the Kingdom of Huarco," *American Scientist* 75, pp. 393–401.

Marcus, J., J. D. Sommer, and C. P. Glew. 1999. "Fish and Mammals in the Economy of an Ancient Peruvian Kingdom," *Proceedings of the National Academy of Sciences* 96, pp. 6564–6570.

Matthews, J. F. 1984. "The Tax Law of Palmyra: Evidence for Economic History in a City of the Roman East," *JRS* 74, pp. 157–180.

Meineke, A. 1867. *Analecta critica ad Athenaei Deipnosophistas,* Leipzig.

Mercer, J. 1976. *Spanish Sahara,* London.

———. 1980. *The Canary Islands: Their Prehistory, Conquest, and Survival,* London.

Meritt, B. D. 1935. "The Inscriptions of Colophon," *AJP* 56, pp. 358–397.

Migeotte, L. 1984. *L'emprunt public dans les cités grecques: Recueil des documents et analyse critique,* Quebec.

———. 1997. "Le contrôle des prix dans les cités grecques," in *Économie antique: Prix et formation des prix dans les économies antiques,* ed. J. Andreau, P. Briant, and R. Descat, Saint-Bertrand-de-Comminges, pp. 33–52.

———. 2001. "Quelques aspects légaux et juridiques de l'affermage des taxes en Grèce ancienne," in *Symposion 1997: Vorträge zur griechischen und hellenistischen Rechtsgeschichte, Altafiumara, 8.–14. September 1997* (Akten der Gesellschaft für griechische und hellenistische Rechtsgeschichte 13), ed. E. Cantarella and G. Thür, Cologne, pp. 165–174.

Miklosich, F. 1869. "Die slavischen Elemente in Neugriechischen," *SBWien* 63.3, pp. 529–566.

Mylona, D. 2008. *Fish-Eating in Greece from the Fifth Century B.C. to the Seventh Century A.D.: A Story of Impoverished Fishermen or Luxurious Fish Banquets* (*BAR-IS* 1754), Oxford.

ODB = A. P. Kazhdan et al., eds., *The Oxford Dictionary of Byzantium,* 3 vols., Oxford 1991.

Oliver, J. H. 1971. "Epaminondas of Acraephia," *GRBS* 12, pp. 221–237.

———. 1989. *Greek Constitutions of Early Roman Emperors from Inscriptions and Papyri* (Memoirs of the American Philosophical Society 178), Philadelphia.

Orlandos, A. K. 1937. "Ἡ Βασιλικὴ τῆς Ἀνθηδόνος," in *Ἀρχεῖον τῶν Βυζαντινῶν Μνημείων τῆς Ἑλλάδος* 3, Athens, pp. 172–174.

Panagiotopoulos, P. 1916. "Θαλασσία ἰχθυοτροφία καὶ οἱ ἰχθύες τῆς λιμνοθαλάσσης Μεσολογγίου," *Δελτίον Ὑδρολογικοῦ Σταθμοῦ* (Ὑπουργεῖον Ἐθνικῆς Οἰκονομίας) 1, pp. 329–448 [= "Piscifacture marine et les poissons de la lagune de Missolonghi," *Bulletin de la Station Biologique* (Ministère de l'Économie Nationale) 1, 1916, pp. 329–392.

Papendick, A. 1926. *Die Fischnamen in griechisch-lateinischen Glossaren,* Königsberg.

Parker, A. J. 1992. *Ancient Shipwrecks of the Mediterranean and the Roman Provinces* (*BAR-IS* 580), Oxford.

P.Cair.Zen. I = C. C. Edgar, ed., *Zenon Papyri: Catalogue général des antiquités égyptiennes du Musée du Caire* I, Cairo 1925.

P.Cair.Zen. IV = C. C. Edgar, ed., *Zenon Papyri: Catalogue général des antiquités égyptiennes du Musée du Caire* IV, Cairo 1931.

Perdrizet, P. 1899. "Inscriptions d'Acraephiae," *BCH* 23, pp. 193–205.

Pfister, F. 1951. *Die Reisebilder des Herakleides* (*SBWien* 227.2), Vienna.

P.London VII = T. C. Skeat, ed., *Greek Papyri in the British Museum* VII: *The Zenon Archive,* London 1974.
Porten, B., and A. Yardeni. 1993. *Textbook of Aramaic Documents from Ancient Egypt* 3: *Literature, Accounts, Lists,* Jerusalem.
Powell, J. 1996. *Fishing in the Prehistoric Aegean* (*SIMA-PB* 137), Jonsered.
P.Oxy. VI = B. P. Grenfell and A. S. Hunt, eds., *The Oxyrhynchus Papyri* VI, London 1908.
P.Oxy. XXXIII = P. J. Parsons, J. R. Rea, and E. G. Turner, eds., *The Oxyrhynchus Papyri* XXXIII, London 1968.
PSI V = *Papiri greci e latini* V, Florence 1917.
P.Tebt. III.1 = A. S. Hunt and J. G. Smyly, eds., *The Tebtunis Papyri* III.1 (Univ. of California Publ., Graeco-Roman Archaeology 3; Egypt Exploration Society, Graeco-Roman Memoirs 23), London 1933.
Purcell, N. 1995. "Eating Fish: The Paradoxes of Seafood," in *Food in Antiquity,* ed. J. Wilkins, D. Harvey, and M. Dobson, Exeter, pp. 132–149.
———. 2005. "The Ancient Mediterranean: The View from the Customs House," in *Rethinking the Mediterranean,* ed. W. V. Harris, Oxford, pp. 200–232.
P.Wisc. II = P. J. Sijpesteijn, ed., *The Wisconsin Papyri* II (Studia Amstelodamensia ad Epigraphicam, Ius Antiquum et Papyrologicam Pertinentia 11), Zutphen 1977.
Reger, G. 1993. "The Public Purchase of Grain on Independent Delos," *ClAnt* 12, pp. 300–334.
———. 1994. *Regionalism and Change in the Economy of Independent Delos, 314–167 B.C.* (Hellenistic Culture and Society 14), Berkeley.
———. 2003. "Aspects of the Role of Merchants in the Political Life of the Hellenistic World," in *Mercanti e politica nel mondo antico,* ed. C. Zaccagnini (Saggi di storia antica 21), Rome, pp. 165–197.
Richmond, J. A. 1973. *Chapters on Greek Fish-Lore* (*Hermes* Einzelschr. 28), Wiesbaden.
Rigsby, K. J. 1987. "A Decree of Haliartus on Cult," *AJP* 108, pp. 729–740.
———. 1996. *Asylia: Territorial Inviolability in the Hellenistic World* (Hellenistic Culture and Society 22), Berkeley.
Robert, L. 1960. "Sur une loi d'Athènes relative aux petites Panathénées," *Hellenica* 11–12, pp. 189–203.
———. 1962. "Les Kordakia de Nicée, le combustible de Synnada, et les poissons-scies: Sur des lettres d'un métropolite de Phrygie au X^{e} siècle: Philologie et réalités," *JSav* 1962, pp. 5–74.
———. 1963. *Noms indigènes dans l'Asie-Mineure gréco-romaine: Première partie* (*BAHIstanbul* 13), Paris.
Roesch, P. 1965. *Thespies et la confédération béotienne,* Paris.
———. 1974. "Sur le tarif des poissons d'Akraiphia," *ZPE* 14, pp. 5–9.
———. 1980. "Appendix Epigraphica," *Teiresias* 10, pp. 1–17.
Rolfe, J. C. 1890. "Discoveries at Anthedon in 1889," *AJA* 6, pp. 96–107.
Rose, M. J. 2000. "The Fish Remains," in *Kommos* IV: *The Greek Sanctuary,* ed. J. W. Shaw and M. C. Shaw, Princeton, pp. 495–560.
Rostovtzeff, M. I. 1941. *The Social and Economic History of the Hellenistic World,* Oxford.
Saller, R. 2002. "Framing the Debate Over Growth in the Ancient Economy," in *The Ancient Economy,* ed. W. Scheidel and S. von Reden, Edinburgh, pp. 251–269 (= *The Ancient Economy: Evidence and Models,* ed. J. G. Manning and I. Morris, Stanford 2005, pp. 223–238).
Sánchez, P. 2001. *L'Amphictionie des Pyles et de Delphes: Recherches sur son rôle historique, des origines au II^{e} siècle de notre ère* (*Historia* Einzelschr. 148), Stuttgart.
SB XIV = *Sammelbuch griechischer Urkunden aus Ägypten* XIV, Wiesbaden 1981–1983.
Schachter, A. 1981. *Cults of Boiotia* 1: *Acheloos to Hera* (*BICS* Suppl. 38), London.
Schaps, D. M. 1987. "Small Change in Boeotia," *ZPE* 69, pp. 293–296.
———. 1988. "Comic Inflation in the Market-Place," *Scripta Classica Israelica* 8–9 (1985–1988), pp. 66–73.
Schläger, H., D. J. Blackman, and J. Schäfer. 1968. "Der Hafen von Anthedon," *AA* 1968, pp. 21–98.

Schmidt, M., ed. [1858–1868] 1965. *Hesychii Alexandrini Lexicon post Ioannem Albertum,* repr. Amsterdam.
Schwarz, H. 2001. *Soll oder Haben? Die Finanzwirtschaft kleinasiatischer Städte in der Römischen Kaiserzeit am Beispeil von Bithynien, Lykien, und Ephesos (29 v. Chr.–284 n. Chr.),* Bonn.
Serra Rafols, E. 1957. "La navegación primitiva en los mares de Canarias," *Rivista de historia canaria* 119–120, pp. 83–91.
Sosin, J. D. 2004. "Acraephia Counts: Π for Π(ΕΤΤΑΡΕΣ)," *ZPE* 148, pp. 193–195.
Stanley, P. V. 1976. "Ancient Greek Market Regulations and Controls" (diss. Univ. of California, Berkeley).
Steinhauer, G. 1994. "Inscription agoranomique du Pirée," *BCH* 118, pp. 51–68.
Stephanides, A. 1943. "Συμβολὴ εἰς τὴν μελέτην τῶν ἰχθύων τῶν γλυκέων ὑδάτων τῆς Ἑλλάδος," *Prakt* 18, pp. 200–210.
Strömberg, R. 1943. *Studien zur Etymologie und Bildung der griechischen Fishnamen,* Göteborg.
Stroud, R. S. 1998. *The Athenian Grain-Tax Law of 374/3 B.C.* (*Hesperia* Suppl. 29), Princeton.
Thompson, D. W. 1936. *A Glossary of Greek Birds,* London.
———. 1938. "Note sur une liste de noms de poissons," *BCH* 62, pp. 439–440.
———. 1947. *A Glossary of Greek Fishes,* London.
Tod, M. N. 1936–1937. "The Greek Acrophonic Numerals," *BSA* 37, pp. 236–257 (= *Ancient Greek Numeral Systems: Six Studies,* Chicago 1979, pp. 62–83).
Ulrichs, H. N. 1840. *Reisen und Forschungen in Griechenland* 2, Bremen.
Vandier, J. 1969. *Manuel d'archéologie égyptienne* 5: *Bas-reliefs et peintures. Scènes de la vie quotidienne,* Paris.
Vatin, C. 1966. "Un tarif des poissons à Delphes," *BCH* 90, pp. 274–280.
———. 1971. "Le tarif des poissons d'Akraiphia," in *Inscriptions de Grèce centrale,* ed. F. Salviat and C. Vatin, Paris, pp. 95–109.
Vélissaropoulos, J. 1980. *Les nauclères grecs: Recherches sur les institutions maritimes en Grèce et dans l'Orient hellénisé* (Hautes études du monde gréco-romain 9), Geneva.
Wallace, P. W. 1979. *Strabo's Description of Boiotia: A Commentary,* Heidelberg.
Waltzing, J. P. 1899. *Études historique sur les corporations professionnelles chez les Romains depuis les origines jusqu'à la chute de l'Empire d'Occident* 3: *Recueil des inscriptions grecques et latines relatives aux corporations des Romains,* Louvain.
Wellman, M. 1907. "Xenocrates aus Aphrodisias," *Hermes* 42, pp. 614–629.
Wilhelm, A. 1939. "Athen und Kolophon," in *Anatolian Studies Presented to William Hepburn Buckler,* ed. W. M. Calder and J. Keil, Manchester, pp. 345–368.
Wilkins, J. 1993. "Social Status and Fish in Greece and Rome," in *Food, Culture, and History,* ed. G. Mars and V. Mars, London, pp. 191–203.
———. 2005. "Fish as a Source of Food in Antiquity," in *Ancient Fishing and Fish Processing in the Black Sea Region* (Black Sea Studies 2), ed. T. Bekker-Nielsen, Aarhus, pp. 21–30.
Williams, C. K., II. 1979. "Corinth 1978: Forum Southwest," *Hesperia* 48, pp. 105–144.
Wörrle, M. 1988. *Stadt und Fest im kaiserzeitlichen Kleinasien: Studien zu einer agonistischen Stiftung aus Oinoanda* (*Vestigia* 39), Munich.
Yardeni, A. 1994. "Maritime Trade and Royal Accountancy in an Erased Customs Account from 475 B.C.E. on the Aḥiqar Scroll from Elephantine," *BASOR* 293, pp. 67–78.

Ephraim Lytle

UNIVERSITY OF TORONTO
DEPARTMENT OF CLASSICS
125 QUEEN'S PARK
TORONTO, ONTARIO M5S 2C7
CANADA

eph.lytle@utoronto.ca