

normal expression in Arrian for 'to the same unit' would be *ἐς τὴν αὐτὴν τάξιν*.

In conclusion, I am not convinced that any of the proposed emendations improves the text of Arrian. It seems rather that the passage is sound and that it reveals the progressive steps taken by Alexander in a policy which annoyed the Macedonians at Susa and led ultimately to the mutiny at Opis.³⁰

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third passage the meaning seems to be 'this happens to the same extent'.

³⁰ This article owes much to the comments of the Editor's advisers, to whom I express my gratitude. The treatment of Arr. vii 6.3 in W. W. Tarn, *Alexander ii* (Cambridge 1948) 164 f. has not been cited, as it is unhelpful.

**Tabulae Iliacae in the
Collection Froehner, Paris**

(PLATE XI)

*In carissimam memoriam Laurentii Tanner qui his studiis me
adulescentem imbuuit*

When discussing the *Tabulae Iliacae* in *JHS* xcix (1979) 26–48 (hereafter 'Horsfall'), I followed the usual and unchallenged view¹ in stating that the group includes twenty reliefs and that five bear the signature of the artist Theodorus (26). Both statements prove wrong. Prof. F. Jouan (Paris-Nanterre) most kindly informed me in the summer of 1979 that an unpublished Thèse de Maîtrise by one of his students, Mlle F. Legrand, (*Les Tables Iliques* [1976] [hereafter 'Legrand']), contained new material on the *Tabulae* and made a copy of her work available to me. It was immediately apparent (Legrand 160 ff.) that the *Tabula* which I shall call 21 Froehner² was unpublished and when it became clear that no publication in France was intended, I sought and was freely granted access. Examination of *Tabula* 20Par., also in the Froehner collection, revealed that its verso³ carried an hitherto neglected signature by Theodorus. Permission to publish *Tabulae* 20Par. (verso) and 21Fro. was unhesitatingly granted. It is a great pleasure to place on record the enthusiasm and generosity displayed by Prof. Jouan and by the staff at the Cabinet des Médailles.⁴

¹ As in, for example, M. Guarducci, *Epigrafia Greca* (Rome 1974) iii 433.

² viii.148 in Froehner's own inventory; the collection has been housed in the Cabinet des Médailles since 1925.

³ *Tabula* 20Par. recto was apparently first mentioned in print by K. Weitzmann, *Greek Mythology in Byzantine Art* (Princeton 1951) 100; partly reproduced, fig. 106. Detailed publication: A. Sadurska, *Mél. Michalowski* (Warsaw 1966) 653 ff. Both Sadurska (656) and Legrand (148) state explicitly and inexplicably that the verso bears no inscription; M. T. Bua, *Mem. Acc. Lincei* viii.16 (1971–2) 4 refers to 20Par. but does not include its verso in her discussion of the Theodorus-inscriptions. It is therefore especially to be regretted that L. Robert only refers to one *Tabula* in the Froehner collection, and that in the list (p. vi) of inscriptions to be excluded from his *Collection Froehner i: Inscriptions Grecques* (Paris 1936). Note that the photograph is enlarged by 50%.

1. 20Par. verso (FIG. 1 and PLATE XIa)

For a discussion (with full bibliography) of the analogues and antecedents of such 'magic squares', the reader may consult Horsfall 29: they work on the principle, as Theodorus himself puts it, that the reader 'shall grasp the middle letter and turn whichever way you want', and suggest very strongly that the craftsman was of Egyptian origin (*ibid.*). The perpendicular right-hand margin suggests that the 'square' was indeed originally square, as were those on 2NY and 3C.⁵ The letters occupy alternate squares on the grid as they do on 2NY, 3C, 5O and 7Ti,⁶ with the result that the reader may proceed not only horizontally and vertically but also, from the centre, diagonally.⁷ It is therefore easy to determine that the central letter lay on line 7 of the surviving fragment.⁸ Furthermore, the surprisingly simple 'rules'⁹ for composing a Theodorean 'square' establish that the first *o* of *Θεοδώρειος*, the last letter of the central line, must be the middle letter of an inscription of an uneven number of letters.

We have on the stone (FIG. 1): [*Θμ*]ήρου Θεοδώρει[ος]. Compare 2NY [*Ιλι*]ᾶς *Θμήρου*, Θεοδώρηος ἢ τέχνη, and 3C, where it is highly likely that the same words constituted the full text (Bua [n. 7] 10), though only Θεοδώρηος ἢ τέχνη are certain. Read here therefore: [*Ιλι*ᾶς *Θμ*]ήρου Θεοδώρει[ος ἢ τέχνη].¹⁰

Two differences are to be noted: the embarrassing and unexplained 'segno verticale' after the definite article (Bua [n. 7] 8 n. 10) is eliminated and to maintain an odd number of letters the form Θεοδώρειος (which is certain) is used in place of Θεοδώρηος. It is very tempting to conclude that 20Par. is therefore later than 2NY and 3C.

On the recto (PLATE XIb), Mme Sadurska, (n. 3) 656, notes that a complete band, illustrating one book of the *Iliad*, is 2.5 cm high, giving just under 10 cm as a likely distance from the bottom of the extant fragment to the lower edge of the complete original (*Il.* xvii–xiii; a very little of xvii is visible). On the verso, the inscription will have continued for another 5 cm or so (8 letters = 16 squares; slightly under 3 to a centimeter), falling, therefore, roughly 5 cm short of where the lower edge of the stone (to judge from Mme Sadurska's calculations) would appear to have been. The 'magic squares' were not centred exactly: on 2NY the margins are 5.2

⁴ I am also most grateful to the British Academy and to the Maison des Sciences de l'Homme, who financed a visit to study the *Tabulae* in Paris; also to the Rosa Morison Fund of University College London for the cost of the illustrations.

⁵ 2NY: New York, MMA 24.97.11; 3C: Paris, Bibl. Nat., Cab. des Méd. 3318. Full details: A. Sadurska, *Les Tables Iliques* (Warsaw 1964).

⁶ 5O: Roma, Mus. Cap., Sala delle Colombe 83b; 7Ti. = Thierry in *Mém. Soc. Ant. France* xliii (1882) 17 f.

⁷ The formulation by Bua (n. 3) 15 is not applicable to 4N.

⁸ Cf. Sadurska (n. 3) 654. On the relief, the band dividing *Il.* xviii and xix runs across the centre of the fragment; *Il.* xiii–xviii and xix–xxiv balance evenly.

⁹ Bua (n. 3) 15, an invaluable exegesis.

¹⁰ Froehner, notebooks viii.148, proposed supplementing τᾶξίς (cf. the epigram on 2NY, Horsfall 27) or τέχνη. I am particularly grateful to Mlle M.-Ch. Hellmann for showing me Froehner's own description; cf. Sadurska (n. 3) 653 n. 3, J. Babelon, pref. to L. Robert (n. 3) ii.

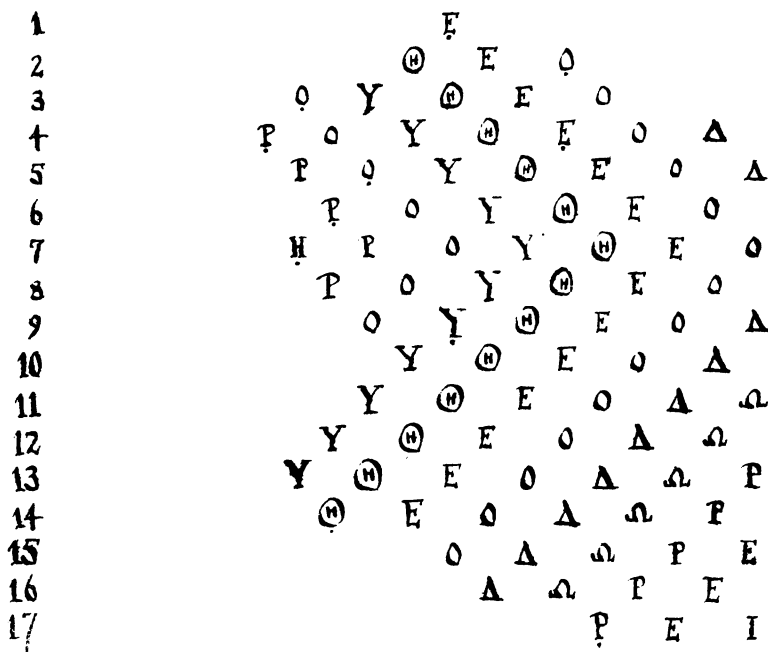


FIG. 1. *Tabula Iliaca* 20Par. verso (drawn by Simon James).

cm (top) and 3.8 cm (side). Here an original of (approximately) 30 cm square seems likely.

Now that parts of both recto and verso may be used, Mme Sadurska's extreme (and justified) caution regarding the composition of the recto can in part be abandoned:

The left-hand column (traces of scenes illustrating *Il.* iv–vi survive) will presumably have been of the same width as the two panels of the right-hand column which survive intact.¹¹ Paired columns framing a central panel are found on 9D (*Il.* and *Aethiopsis*).¹² It is clearly likely that the recto here carried a matching pair of columns (?*Odyssey*) on the other side of the central panel (cf. Sadurska [n. 3] 653); unfortunately, any reference to the non-Iliadic content of the recto in the 'magic-square' inscription seems excluded. The central panel will have been rather under 10 cm square, and perhaps slightly higher than it was wide (as is the case with 1A); above and below that panel, it is clearly tempting to suggest that there were (e.g.) two pairs of short horizontal bands of scenes.¹³

Sadurska, (n. 3) 657, recognised the high quality of 20Par. and the skill of the workmanship; she suspected it might be from Theodorus' hand and that suspicion is now rendered a certainty.

2. *Tabula 21 Froehner* (PLATE XIc)¹⁴

Like 20Par., bought by Froehner in Rome in 1887; no provenance. Palombino, 7 cm by 6.4 by 1.8; PLATE XIc is 1.6 times the size of the original. Three incomplete Iliadic scenes:

¹¹ Just over 5.3 cm to include the panel and the outer margin.

¹² Bibl. Nat. Cab. des Méd. 3319; Sadurska (n. 5) 55 ff.

¹³ Cf. the paired bands below the central scene on 1A, Roma, Mus. Cap. Sala delle Colombe, 83; or the paired bands above and below the central panel on 16Sa., Roma, Bibl. Vat., Museo Sacro, Inv. 0066.

¹⁴ viii.146 in Froehner's notebooks; Legrand 161 f.; the catalogue numbers used by Legrand are inexplorable.

(i) Of the uppermost scene, presumably from *Il.* xxii, no details are identifiable with certainty and comparison with other scenes from this book (on 1A, 2NY, 9D and 13Ta.)¹⁵ does not suggest even tentative explanations.

(ii) *Il.* xxiii: at l., Patroclus (?head to l.) on the funeral pyre (cf. 1A, 9D). No figures are visible round the pyre. Centre and r.: scene from the chariot race. On 1A 'deux petits biges' (Sadurska [n. 5] 27), on 2NY 'quatre chars au galop, attelés de quatre chevaux chacun' (*ibid.* 38). The scene here is badly worn: the descriptions by Legrand and Froehner differ widely and I have changed my own identification several times. Studying the enlargement, I incline to think that Froehner's own terse 'deux quadriges galopant à dr.' entirely correct; the right-hand chariot and driver are visible below the third and fourth horses of the left-hand team and above a clearly-defined wheel.

(iii) Top, centre [NEKPO]Y AYTPA (letters between 1 and 1.5 mm high).¹⁶ The head on the left is that of Achilles, as is clear from the fact that a kneeling Priam is stretching out his arms towards Achilles' (missing) knees. Priam appears to be wearing a Phrygian cap and long tunic. Above him stands a figure which seems to be grasping the lance which stands just in front of Achilles.¹⁷ Centre and r.: cart drawn by two yoked mules,¹⁸ containing bundles (the ransom). To l. of cart, a stooping figure, with, I suspect, a bundle on his back. Above the mules, another figure (head and shoulders) unloading. To r., traces of a schematic representation of Troy.¹⁹

¹⁵ 13Ta: London, BM 2192.

¹⁶ Cf. 12F (Paris Cab. des Méd. 3320) [Ω. Λύτρα νεκροῦ, Sadurska (n. 5) 65.

¹⁷ Froehner: Automedon; on 1A and 12F, Hermes appears in the parallel scenes and Legrand thinks it is Hermes here too, but I do not see a petasos and the lance does rather suggest Automedon.

¹⁸ Cf. the excellently preserved mule-cart at the top of 2NY.

¹⁹ Contrast the scene as portrayed on 1A (Sadurska [n. 5] 27); 2NY

Below, on border: [ΑΥ]ΤΡΟΥΜΕΝΟΣ ΤΟ Ε[ΚΤΟΡΟΣ ΣΩΜΑ].²⁰

Note that individuals are not named on the scenes and the scenes themselves are thinly divided, more so, it would appear, than on any other *Tabula*. The longer inscription below stands on the (thicker) outer border of the whole.

There is no basis for speculation on the size and composition of the original *Tabula*. On 20Par., the panels xiii–xxiv ascend (cf. 1A, 2NY, etc.); here they descend (cf. 3C, 6B, etc.), but we cannot conclude that our fragment occupied the bottom right-hand corner of the entire original. I am equally reluctant to come to any firm conclusions regarding the place of 21Fro. in the chronological and stylistic sequence of the *Tabulae*; my tentative impression would be that structure and composition suggest a fairly early date, but that no very favourable conclusions regarding the expertise of the craftsman can be reached, in the present state of the *Tabula*. Thus possibly, ‘workshop of Theodorus’, early first century AD.

3. Wilhelm Froehner

The remarkable career of Wilhelm Froehner, the purchaser of *Tabulae* 20 and 21, may well have escaped the notice of Anglophone classicists:²¹ he deserves far wider fame (and notoriety); even a biography would be appropriate. That promised by Deetjen, on the basis of Froehner’s diaries, appears never to have been completed. For now, the briefest outlines.

Born in 1834 (?1835), Froehner was the son of a Karlsruhe tailor who doubled as a court musician, though illegitimate grand-ducal origins were later alleged in derogation of patronage and appointments received. Early an avid reader and collector, he went first to the University of Freiburg; nominally a student of theology, he pursued a dozen languages, till Moriz Haupt (the dedicatee of his first book, on German onomastics) revealed the fascination of Latin; Bergk grounded him in archaeology. He studied next at Bonn, where Jahn and Welcker were still both fully active and where *Altertumswissenschaft* was presented as an engrossing and indivisible entirety. When Wilamowitz arrived ten years later, Jahn was past his best and Welcker old and blind.²² As a disciple of the Bonn school, Froehner is paradoxical: his range, from Egyptian art to Byzantine literature, is exemplary; not so, his grasp and technique. He elucidates a text or monument in isolation; the sentence or object is sufficient in itself and never serves as a key to open wider perspectives. Yet his place in that tradition was recognised by his (Sadurska 56) is much closer as are some details on 9D (Sadurska 56) and 12F (Sadurska 65). For this scene on the *Tabulae*, cf. Sadurska 66.

²⁰ Cf., on 1A, the summary, line 102 f. (Sadurska [n. 5] 31).

²¹ See S. Reinach, *RA* ser. 4 v.1 (1905) 224 ff. and ser. 5 xxii (1925) 140 ff., A. Dieudonné and G. Feuardent, *RNum* ser. 4 xxix (1926) 237 ff., W. Deetjen, *NJb* iv (1928) 723 ff., *Souvenirs de Froehner*, recueillis par la Comtesse de Rohan-Chabot (Paris 1931); préface by F. Cumont; repr., slightly abridged, *Revue des Deux Mondes* ci.2 (1931) 569 ff., J. Babelon, pref. to L. Robert (n. 3). Not all the factual details, even when F. was himself consulted, are beyond question.

²² Wilamowitz, *Erinnerungen* (Leipzig 1928) 85 ff.; see O. Kern, *H. Diels u. C. Robert*, *Bursian Suppl.* ccxv (Leipzig 1927) 38 on Wilamowitz’ preference for the Bonn of Usener and Buecheler. Cf. further E. Fraenkel, *Kl.Beitr.* ii 567, W. Schmid, *Bonner Gelehrte* (Bonn 1968) 128, A. D. Momigliano, *Riv.Stor.It.* lxxxiv (1972) 747.

obituarists and I would add that it was Froehner who contributed the archaeological additions when the *Encyklopädie . . der philol. Wissenschaften* of his Landsmann and Jahn’s master, August Boeckh was reissued.²³ But for Froehner, Bonn ended in catastrophe: in February 1858, he fled home; Ritschl was clearly not blameless; Usener knew the story but would not tell Salomon Reinach; Flaubert hoped to hear it from Frau Ritschl; Mommsen viewed Froehner with loathing.²⁴ But Göttingen awarded him a doctorate on the strength of his published works and he catalogued the antiquities in Karlsruhe.

Baden then looked to France, not Berlin,²⁵ and on 30th November, 1859 Froehner arrived in Paris; two years later, he had secured a temporary post on the staff of the almost uncatalogued Louvre. A remarkable decade followed: Nieuwekerke recommended him to Napoleon III as a research assistant on his biography of Caesar, and he was soon—as he himself most amusingly narrates—translating Mommsen and Drumann to the emperor on a regular basis at a large salary. Invitations to the imperial billiard-room and banqueting hall followed, as did French citizenship, the Legion of Honour and a permanent post at the Louvre. Thus fortified, he set about making enemies with gusto: a vicious archaeological critique of Salammô roused Flaubert to reply in kind;²⁶ the fight ran into several rounds. Publication of inscriptions seen casually at an exhibition enraged the Académie des Inscriptions.²⁷ Relations with Longpérier, Conservateur des Antiques at the Louvre, were no better; the museum staff equally could not stand the hyperactive young German. Lenormant he accused of plagiarism over the Hildesheim treasure. But nothing impaired Froehner’s productivity. The decade saw an edition of Avienus, a first study of Trajan’s column, catalogues of antiquities in the Louvre, in the imperial collections, and in provincial museums, and a dozen articles in *Philologus* alone.²⁸

Nemesis struck on an appropriate scale: first, a new administration at the Louvre; Froehner was superseded and granted an imperial sinecure. War with Germany followed within weeks. Froehner was twice imprisoned, on suspicion of an intention to place the pick of France’s art treasures in German hands. The second time, he was released on Gambetta’s direct intervention and gave his accusers the lie by active service on the ramparts during the siege. By 1871 he was inevitably jobless. For years he fought in vain for restitution; only once again did he set foot in the Louvre. As a prospective employee, open in his Bonapartist sympathies, he proved intolerable alike to the Director of the École des Hautes Études, to the Department of Higher Education, and to the Beaux-Arts. The *Privatge-*

²³ Boeckh and Jahn: cf. (e.g.) W. Unte, *AuA* xxvi (1980) 173, Wilamowitz (n. 22) 87.

²⁴ Reinach, *RA* xxii (1925) 141, Flaubert, Letter 1081, *Oeuvres Complètes* xiv (Paris 1975); Froehner succeeded in acquiring this letter: A. Hamilton, *Elliott Monographs* iv (Baltimore 1917) 109 n. 1.

²⁵ Cf. Sibylle Bedford, *A Legacy* (Penguin ed. 1964) 27 f.

²⁶ The texts are reprinted in (e.g.) Flaubert, *Oeuvres Complètes* ii (Paris 1971) 369 ff.; cf. Letters (n. 24) 1079, 1084, Enid Starkie, *Flaubert the Master* (London 1971) 80, B. F. Bart, *Symposium* xvi (1962) 148 ff. and *Flaubert* (Syracuse 1957) 435; it is not clear that Flaubert was right to suspect that Froehner was only a front.

²⁷ *Philol.* xix (1863) 135 ff., Reinach, *RA* v.1 (1905), xxii (1925) 144 f.

²⁸ Convenient partial bibliography in Reinach, *RA* xxii (1925).

lehrter came eventually to prosper; his skills as a cataloguer re-established his position. Several museums turned to him, but his greatest success was as a compiler of auction catalogues: for thirty-five years they appeared in a steady flood, alongside numerous other books and articles.²⁹ As a controversialist, Froehner was impenitent: 'un franc-tireur de l'archéologie' Cumont calls him, brilliantly (xi). Like Housman, he lovingly collected and polished his barbs; his malice was conscious and his persecution-mania evident. Salomon Reinach fought him for forty years;³⁰ they never met and Reinach's obituary is that of a fascinated adversary. Slowly, and as the result of much travel, Froehner stuffed a small flat with a prodigious library and collection of antiquities, notably of small inscribed objects, of whatever kind; scholarly visitors were fiercely discouraged and nothing was published. Legends grew. Large and sombrely elegant, Froehner outlived a distinguished circle of literary and aristocratic acquaintances; his old age, consoled by music, by a return to his beloved Horace, and by a few persevering friends was shaken by German bombs and shells, and eventually afflicted by blindness. He died in May 1925, perhaps the last classical scholar to retain comprehensive and active mastery of both literature and archaeology. Froehner would clearly have been delighted that *Tabula* 21Fro. escaped notice as long as it did; it would have amused him even more that students of *Tabula* 20 had for so long neglected to study its verso.

4. Addenda

19 of the 21 *Tabulae* survive; I have seen 13 recently and am in a position to clarify certain points:

(i) My identification (after Heinze) of a kneeling figure on 1A who passes a casket (?containing the Penates) to Aeneas as the (Virgilian) Panthus (Horsfall 39) was challenged by Prof. Lloyd-Jones,³¹ who asserts (no source quoted) that the letters *AON* seem to be visible. Were this so, Panthus would have to go, but it is not. Careful examination in good conditions³² reveals no trace of lettering.

(ii) Regarding the indistinct female figure in the Scaean Gate on 1A, who has been identified as Creusa (Horsfall 40), I would say that the figure is definitely female and probably veiled, but I am no reader to identify her.

(iii) Even after reading Sadurska (n. 5) 67 and C. Robert, *Ann.Inst.di Corresp.Arch.* xlvii (1875) 267, I suspect that my statement (Horsfall 26) that the *Tabulae* derive from Rome or the Campagna does not require modification. As for this piece (13 Ta.), 'esser desso trovato senz' altro a Taranto stesso'; it passed into the collection of Canon Ceci Palumbo's uncle. E così via . . . Robert uses 'trovato', I suspect, in the sense of

²⁹ Cf. Dieudonné and Feuardent (n. 21) for an assessment of his contribution to numismatics.

³⁰ *RA* xxii (1925) 150.

³¹ *Magna Graecia* xv 1-2 (1980) 7; unfortunately Ll.-J. uses the old drawings by Feodor Iwanowich and his archaeological evidence is based on outdated publications; cf. Horsfall 41; it will not do simply to refuse to acknowledge that our perception of the artistic and literary evidence for the Aeneas-legend has altered fundamentally in the last forty years.

³² I am grateful to the Director of the British School at Rome and to the staff of the Musei Capitolini for their help.

'excavated'; purchase is clearly not excluded. An Apulian provenance (let alone workmanship) does not seem at all securely established.

(iv) I had hoped, from an examination of the surviving portions of the edges of the *Tabulae*³³ to form some idea of how they might have been used or viewed in antiquity. But no traces of nails, frames, or clamps survive (cf. Horsfall 34 n. 60). 4N is especially problematic: a circular *Tabula*, relief on recto, altar-shaped 'magic square' and palindrome on verso, Homeric text round the rim. Perhaps to be left casually on a citrus-wood table in the library.³⁴ But note, nearly 3 kg. Only 13Ta. (verso only inscribed) offers a neatly drilled central hole (Sadurska [n. 5] 67); it would only have provided balanced suspension when the *tabula* was intact. A bit of string (and a hook) was not, however, and could not have been, the normal answer.

(v) The *tabulae* are heavy for their size and fragile; 1A is only 1.5 cm thick but when complete will have weighed some 4 kg; it seems to me absurd (cf. Horsfall 31 f.) to suppose that they had any place in the schoolroom. To call the *tabulae* 'presents'³⁵ is merely to pose the fundamental question of their purpose over again at one remove. Even if their owners did not normally buy them themselves, we still need to know their intellectual and socio-economic contexts.³⁶

That more *tabulae* languish unacknowledged in the storerooms of the world's museums is by no means unlikely, and it is fervently to be hoped that the rediscoveries discussed in this paper may prompt curators to re-explore or re-examine reliefs in their charge.

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³³ 17M and 19J are unfortunately now set in frames.

³⁴ Cf. Sadurska (n. 5) 19, using the word 'bibelot' in her paraphrase of the old and valuable discussion by Mancuso.

³⁵ Sadurska *ibid.*, Legrand 263.

³⁶ Martial xiv 183 ff. lists numerous literary texts given as presents; many were parchment codices, appealingly compact; as on the *Tabulae*, a taste for miniaturisation is evident. But Martial has serious readers of complete and continuous texts in mind, and that is something Theodorus' clientele were not (Horsfall 34). The emphasis in Martial is repeatedly on the format; not even xiv 190 necessarily refers to an epitome of Livy (*pace* E. Galdi in *Studi Liviani* (Rome 1934) 244, C. Begbie, *CQ* xvii (1967) 332, etc.). Martial has papyrus rolls of Livy and therefore lacks room for the whole work. The recipient of a Livy in codices has it all and saves space too. The fashions, therefore, are not altogether comparable, and we are really no nearer to knowing the context in which the *Tabulae* changed hands. Prof. Jouan and a University of Paris-Nanterre lecture audience kindly alerted me to the issue.

Aristotle's lantern

In *Historia Animalium* iv 531a3-5, Aristotle draws some sort of analogy between sea-urchins and lanterns—an analogy which, thanks to Jacob Klein, has found its way into the vocabulary of modern invertebrate zoology.¹ At the close of the discussion in his Loeb

¹ Cf. F. J. Cole, 'Aristotle's Lantern', *Centaurus* i (1950-1) 377, for various views that have been held on the reference of the lantern analogy and on the history of the term 'Aristotle's lantern'. According to Cole, it is first used as a technical term in zoology by Jacob Klein in his *Naturalis Dispositio Echinoderatum* (1734) 41, and pl. 31.



(c) *Tabula Iliaca* 21 Fro.



(a) *Tabula Iliaca* 20 Par. verso.



(b) *Tabula Iliaca* 20 Par. recto.

TABULAE ILLIACAE