

## CHAPTER 6

## THE HIERATIC LABELS, 1979-82

by

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**6.1 Introduction**

Preliminary copies of some of the labels recovered during the seasons 1979, 1980 and 1981 were made by M. Jones, Dr. J. Janssen and J. Bird respectively. These were collated with the originals by the present writer in March, 1982, when the finds from the 1982 season were also copied, and a number of joins made. A few labels from the very end of the 1982 season were copied by B.J. Kemp.

The remains of one hundred and thirty labels are preserved, in varying degrees of fragmentation. All except nos. 129 and 130 come from the Workmen's Village. The number recovered is much larger than that recorded from the earlier excavations at this site (*COA I*: 164-8, Plate LXIII, A-M). This is probably due in part to more meticulous technique (many of the smallest pieces were only recovered by sieving (Kemp 1981: 14), but also to the location of much of the work in the village dumps, where such broken material would naturally be discarded, rather than in the Walled Village itself. The fragmented state of the texts and the cursive nature of the hieratic make transcription tentative in many cases.

All the inscriptions are from jar labels, no true ostraca having been found, and fall broadly within the larger corpus from the main part of the city (Petrie 1894: Plates XXII-XXV; *COA I*: 164-8, Plates LXIII-LXIV; *COA II*: 103-8, Plates LVII-LVIII; *COA III*: 183-80, Plates LXXXIV-XCVIII). The range of dates is from year seven to seventeen, presumably of Akhenaten, with years one and two of an unnamed successor, and an isolated year thirty-one which must refer to Amenophis III:-

Year 31	: no. 73
Year 7	: no. 128
Year 9	: no. 57
Year 12	: nos. 46, 50, 61, 100
Year 13	: nos. 44, 129 (the latter not from the Workmen's Village)
Year 13/14	: no. 18
Year 14	: nos. 37, 97
Year 15	: nos. 17, 54
Year 16	: nos. 9, 25, 38, 79
Year 17	: nos. 71, 111
Year 10 + x	: nos. 7, 15, 55, 109
Year 1	: nos. 26, 33, 65, 68, 84, 118 (?)
Year 2	: nos. 2, 70 (?)

Year  $x + 1$  : no. 35

There is a marked preponderance of dates in the later years of Akhenaten's reign, and the beginning of his successor's, and this distribution is confirmed by the prevalence of the title *ḥry bḥ*, which has been shown to be characteristic of the period from year thirteen of Akhenaten down to the early years of Tutankhamun (Cerný 1964: 38). This pattern is probably predictable rather than significant as far as the period of occupation of the village is concerned, given the fragile nature of the evidence, and the tendency for material of this kind closest in time to the abandonment of a site to be much more fully represented than comparable evidence from earlier years (although note the remarks on the pattern of ring bezels found, *AR I*: Chapter 9). The same phenomenon can be observed at the similarly short-lived site of Malkata (Hayes 1951: Figure 16) and, on a grander scale, at Deir el-Medina.

The number of wine labels is striking. It has become clear in recent years that this was the commodity most frequently stored and transported in labelled vessels. This is true, for example, at Buhen (Smith 1975: 181-2), at Deir el-Medina (Koenig 1979, 1980) and at Malkata, when allowance is made for the effect of the *sed*-festivals (Leahy 1978: 13), as well as at Amarna (*COA III*: 163-9). In the Workmen's Village, however, the proportion of wine to other commodities such as meat is much higher than elsewhere at Amarna. There are twenty-five preserved references to wine (*irp*), and approximately the same number again mention the Western River, an area whose principal product was wine, or officials connected with wine. Other commodities mentioned are meat (*iwf*: nos. 9, 61, 100), incense (*snṯr*: no. 82), pomegranate wine (*šdḥ*: no. 97), grain (*bsj*: no. 49), oil (*mrḥt*: nos. 36, 130, probably 112); *bjk* (no. 86) and pig-fat (*mrḥt n šjz*: no. 8). Yet wine was not a staple of the Deir el-Medina community (Janssen 1975: 350), and is unlikely to have been so among a comparable, if not identical, group of people at Amarna. It is a legitimate inference, therefore, that many of the jars on which these labels occur were being reused at the Workmen's Village, and that the labels do not necessarily provide a reliable guide to the diet of its inhabitants. The period elapsing before reuse is unlikely to have been long, however, so that any conclusions drawn from the dates will not be affected.

In the following catalogue of the labels, translation where possible and commentary where appropriate are followed by the object number of each piece in bold type, its grid and level or unit references (*AR I*: v-vi), and the figures on which facsimile and transcription can be found.

1. Unintelligible traces only. **25 + 77**. X1.f6.2c and X1.e6.2a respectively. Figures 6.1, 1a.

2. "Year two, wine of the estate of the Aten...". **28 + 65**. X1.e6.2a and X1.f6.2c respectively. Figures 6.1, 1a.

3. "...Setekhmes". Cf. no. 58 below. For the writing of *-ms* and determinative, cf. Černý 1965: Plate III, no. 12. The name is common in the New Kingdom (Ranke 1935: 322, 2) and attested on a hieratic label from Malkata (Hayes 1951: Figure 21). Cf. also Petrie 1894: Plate XXII, no. 5. **40**. X1.f6.2c. Figures 6.1, 1a.

4. "...of the estate of Ankh-Re (?)" in one line, and the end of a personal name: -*i* in the second. For the estate, cf. *COA* III: Plate LXXXVIII, no. 99, and no. 93 below. **48**. P17(3). Figures 6.1, 1a.
5. "...wine of the mansion...". **53**. 018(1). Figures 6.1, 1a.
6. "...wine...". **80**. N17(2). Figures 6.1, 1a.
7. "Year ten + x...". **105**. N17(2). Figures 6.1, 1a.
8. "Pig-fat of the herds of the estate of the Aten in/from the Western (?) River...". *Mḥt n šjṯ* was used in medical remedies (Von Deines and Grapow 1959: 262, 271) but seems also to be attested on a hieratic label from Deir el-Medina (Koenig 1979: Plate 12, no. 6112). The reference to the Western (?) River seems to prove that it was brought from the Delta and was not, in this instance at least, a local product. **188 + 191**. Both N17(8). Figures 6.2, 2a.
9. "Year sixteen, meat (*iwf*)...prepared in...". See *COA* III: 172 for this section of the meat label formula. **189**. N17(8). Figures 6.2, 2a.
10. "...estate of the Aten...Western River, *ḥry bḥ*...". **190 + 1634**. N17(8) and N19(dump) respectively. Figures 6.3, 3a.
11. "...wine of the estate of the Aten...*ḥry bḥ* Huy...". Cf. *COA* III: Plate XC, no. 164. **192**. N17(8). Figures 6.2, 2a.
12. "Thirty-six". The figure is quite isolated and must indicate the amount in the vessel, presumably in *hnw*. The occurrence of the same figure on another label (*COA* II: Plate LVIII, no. 50) suggests that it may have been a standard measure. Cf. also nos. 41, 42 below. **193**. N17(8). Figures 6.3, 3a.
13. "...of the Western River, *ḥry*...". **194**. N17(8). Figures 6.2, 2a.
14. "...of Pharaoh, l.p.h.". On hieratic labels at Amarna, this epithet occurs mostly in the phrase *šhyt pr-ḳ* on meat jars (*COA* III: 171). **195**. N17(8). Figures 6.2, 2a.
15. "Year ten + x...". **312**. L17(dump). Figures 6.3, 3a.
16. "...wine of the estate of the Aten...*ḥry bḥ* Su...". The name might also be lu... **313 + 713**. L17(dump) and M16(3) respectively. Figures 6.3, 3a.
17. "Year fifteen, wine of the estate of the Aten from the Western River from *Pḥ-nm-n-iw-šd*, *ḥry bḥ* Re". For the toponym, cf. *COA* III: 166, 10. **345 + 350**. N17(9) and N17(10) respectively. Figures 6.3, 3a.
18. "Year thirteen/fourteen...estate of the One who propitiates [the Aten]...".

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For this estate, see *COA III*: 198-9. **423**. M18(2). Figures 6.4, 4a.

19. "...of the estate of the Aten of...". **428**. M16(1). Figures 6.4, 4a.

20. "...of the estate...Western River (?)...". **434**. M18(5). Figures 6.4, 4a.

21. "...of the estate of Men[kheperu]re (?)...". Cf. no. 48 below. **523**. M16(1). Figures 6.4, 4a.

22. "...for the day of the Appearance of the King...". This is probably a reference to the celebration of an accession or coronation anniversary. The various connotations of *hꜣw (m) nsw* are discussed by Redford 1967: 3-27. Cf. also the formula *n hꜣw x* which designates commodities intended for a specific day (Spiegelberg 1923: 34-5). **582**. L17(dump). Figures 6.4, 4a.

23. "...the estate of the princess...". For the estates of the various princesses, see *COA III*: 199. **660**. K16(dump). Figures 6.4, 4a.

24. End of a personal name, *-ꜣy (?)*. **674**. K16(dump). Figures 6.4, 4a.

25. "Year sixteen...River...". **715**. M17(1). Figures 6.4, 4a.

26. "Year one, wine of the estate Appearance of the Aten (?)...Western River...". This is probably a slightly better preserved reference to the estate attested in *COA III*: 165, no. 23. **721 + 865**. M16(4) and M18(4) respectively. Figures 6.5, 5a.

27. End of a line only. **806**. L17(7). Figures 6.5, 5a.

28. Remains of two lines. **807**. M17(3). Figures 6.5, 5a.

29. "...wine...Western River...". **866**. M17(3). Figures 6.5, 5a.

30. Beginning of a cartouche. **867**. M17(3). Figures 6.5, 5a.

31. "...*hꜣw*...". **903**. L17(6). Figures 6.5, 5a.

32. "...wine of the estate of the Aten...Western River, *hꜣy bꜣh*...". **905**. K16(dump). Figures 6.5, 5a.

33. "Year one, wine of the estate...". **935**. N16(1). Figures 6.5, 5a.

34. "...Western River...". **936**. N16(1). Figures 6.6, 6a.

35. "[Year x + ]1, wine of the House of Provisions...". Cf. no. 50 below. **1011**. M17(7). Figures 6.6, 6a.

36. "...*mꜣꜥt* oil of...". Remains of a second line below. **1013**. M17(7). Figures

6.6, 6a.

37. "Year fourteen...". 1024. M16(brushing). Figures 6.6, 6a.

38. "Year sixteen, wine...*hry bch*...". 1046 + 2131. N16(1) and N15(3) respectively. Figures 6.6, 6a.

39. "...of the estate of Tiye, may she live...". The second line preserves the end of a place-name and the word *hnkw*, perhaps "donated lands" (Gardiner 1947: 111-13). 1055 + 1074. Both N16(2). Figures 6.6, 6a.

40. Beginning of a year date ? 1071. N17/16(3). Figures 6.8, 8a.

41. "Twenty-six and a half". An isolated volume indication from the same vessel as the next entry. Cf. comment on no. 12 above. 1072. N16(2). Figures 6.7, 7a.

42. "...the Aten, l.p.h., from the Western River: twenty-six and a half *hnw*". Separate from this main text are a partially preserved figure "twenty-six and a half" and the text of the previous entry, both of which reiterate the amount contained in the vessel. 1073 + 1082 + 1083 + 1085 + 1088 + 1103 + 1594. All N16(2) except the last which is from N17/16(3). Figures 6.7, 7a.

43. Part of one line. 1104. N16(5). Figures 6.7, 7a.

44. "Year thirteen...". A second line with the personal name *Ry* (Ranke 1935: 220, 9). Since the top of the first numeral is not preserved, "twenty-three" and "thirty-three" are theoretical possibilities, but the context favours "thirteen". 1109. M17(12). Figures 6.8, 8a.

45. "...the Aten, l.p.h., of the Western River...". 1176 + 1268. N16(5) and M16(mixed levels) respectively. Figures 6.9, 9a.

46. "Year twelve, wine (?)...". 1177 + 1491b. N16(5) and N16(7) respectively. Figures 6.8, 8a.

47. "...from the Western River of...". 1181. N16(7). Figures 6.8, 8a.

48. "...the estate of Men[kheperu]re...". A second line with the end of a personal name *-y*. It seems necessary to assume the omission of *-hpr*. For the estate of Tuthmosis IV, see Leahy 1978: 17, no. 85 and COA III: 200. 1210. N16(5). Figures 6.8, 8a.

49. "*Ḥḥ*". This commodity does not often occur in jar labels, but it is attested at Malkata (Hayes 1951: Figure 15, nos. 220-22) and Deir el-Medina (Koenig 1979: Plate 26, nos. 6233-5) as well as in the main city at Amarna (COA III: Plate XCVII, no. 323). In each case, it stands alone rather than as part of a formula. For the meaning of the word, see Posener-Krieger 1977: 67-71, who argues that it

designates a product which can be manufactured from various kinds of grain, rather than a specific kind of raw grain, as generally believed. 1219. N16(7). Figures 6.8, 8a.

50. "[Year] twelve, wine of the House of Provisions of the estate of Ankhaten...". Here again, "twenty-two" and "thirty-two" are theoretically possible readings. *pr ḏfḏw* does not seem to be attested on other Amarna labels, unless it is related to the *šnt wr ḏfḏw pḏ ḏtn* found on a number of meat labels (COA III: Plates XCI, no. 182; XCII, no. 212; XCIII, no. 214; XCIV, nos. 239, 240; probably also Petric 1894: Plate XXIII, no. 55). For the estate of Ankhaten, see COA III: 165, no. 19. 1222. N16(7). Figures 6.8, 8a.

51. Unintelligible traces. 1223. N16(5). Figures 6.9, 9a.

52. Part of a line. 1232. L17(4). Figures 6.9, 9a.

53. "...ḥry kḏmw...". 1330. Drift sand. Figures 6.9, 9a.

54. "Year fifteen...". 1331. Drift sand. Figures 6.9, 9a.

55. "Year ten [+ x]...River...". 1398. L10(1). Figures 6.9, 9a.

56. Beginning of a line. 1491a. N16(7). Figures 6.9, 9a.

57. "[Year] nine, wine of the Western River...ḥry kḏ[mw]...". Nineteen, twenty-nine, etc. are theoretically possible. 1491c. N16(7). Figures 6.9, 9a.

58. "...Setekhmes (or Setekhi ?)". Cf. no. 3 above. 1491d. N16(7). Figures 6.9, 9a.

59. "...ḥry kḏmw...". 1491e. N16(7). Figures 6.9, 9a.

60. "Year...". 1494. O15(2). Figures 6.10, 10a.

61. "Year twelve, meat...ḥyt under the authority of...". For *ḥyt*, a place where meat was prepared, see COA III: 171-2. 1633 + 2324 + 2607. M19/N19(dump), L18(7) and L18(14) respectively. Figures 6.10, 10a.

62. "Year...". 1684. J19(1). Figures 6.10, 10a.

63. "estate of...". 1747. L18(6). Figures 6.10, 10a.

64. "...Aten of...". Another line with the end of a personal name, *-ky*. 1790. P16(1). Figures 6.10, 10a.

65. "[Year] one, wine...ḥry ḏḥ ḏ...". For a man called *ly* with the same title, see COA III: 176. 1791. N15(1). Figures 6.10, 10a.

66. "...wine of the estate of the Aten...*bḥ*...". 1859. M10(1). Figures 6.10, 10a.
67. "...River...". Remains of another line above. 1949. N19(3). Figures 6.10, 10a.
68. "Year one, wine...". 1988. N15(1). Figures 6.11, 11a.
69. "...royal scribe...". 1989. N15(1). Figures 6.10, 10a.
70. "Year two (?)...river...". The two vertical strokes of the numeral converge slightly but not as much as one would expect for "ten". 1992. N15(1). Figures 6.11, 11a.
71. "Year seventeen, wine...Western River...". 2060. O16(4). Figures 6.11, 11a.
72. Part of a line. 2065. O15(4). Figures 6.11, 11a.
73. "Year thirty-one...". This must refer to the reign of Amenophis III. For comparably high dates, twenty-eight and thirty, at Amarna, see *COA III*: 152-4. Such dates have no bearing on any coregency question, as noted recently by Murnane 1977: 127-9. 2069. O15(4). Figures 6.11, 11a.
74. Traces only. 2096. N15(3). Figures 6.11, 11a.
75. "...wine...". 2123. N15(3). Figures 6.11, 11a.
76. Traces only. 2306. O15(7). Figures 6.11, 11a.
77. A personal name? 2312. O15(7). Figures 6.11, 11a.
78. "Year...*ḥry* (?)...". 2320. P15x(8). Figures 6.11, 11a.
79. "Year sixteen, wine...". 2321. P15x(8). Figures 6.12, 12a.
80. "Year...River (?)...". 2325. L18(7). Figures 6.12, 12a.
81. "...[wine of Tja]ru...(?)". Cf. nos. 83, 91. 2326. L18(7). Figures 6.12, 12a.
82. "...fresh incense of the mansion...". Cf. *COA III*: Plate XCVI, no. 290. 2349. M10(2). Figures 6.12, 12a.
83. "...of Tja[ru]...(?)". Cf. no. 81. 2474. L18(12B). Figures 6.12, 12a.
84. "Year one...". 2481. L18(13). Figures 6.12, 12a.
85. "...of the estate...". 2501. N19(6). Figures 6.12, 12a.

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86. "...sweet [b]k-oil...". 2521. M9(9). Figures 6.12, 12a.
87. Traces only. 2531. M9(8). Figures 6.13, 13a.
88. "...wine of the estate of the Aten, l.p.h.,...Western River...". 2541. S12(surface). Figures 6.12, 12a.
89. A personal name. 2542. J14(surface). Figures 6.13, 13a.
90. Part of a line. 2558. 015(7). Figures 6.13, 13a.
91. "...wine of Tja[ru]...". Cf. nos. 61, 83. 2565.. L18(12A). Figures 6.13, 13a.
92. "...Western River...". 2581. L18(14). Figures 6.13, 13a.
93. "...estate of Ankh-re(?)...". Cf. COA III: 165, nos. 19, 21. 2660. M14(surface). Figures 6.13, 13a.
94. "...cstate of the queen/princess...". The definite article before the cartouche is unusual but not unparalleled, cf. COA III: Plate XCIV, no. 245. 2686. M9(drift sand and collapsed baulk). Figures 6.13, 13a.
95. Part of a line. 2833. M10[75]. Figures 6.13, 13a.
96. "...estate (?)...". 2838. M12[30]. Figures 6.13, 13a.
97. "Year fourteen, good quality pomegranate wine of the estate...Western River, hry bch...". 2859. N9[50]. Figures 6.13, 13a.
98. "...the Aten...". 2949. L14[11]. Figures 6.14, 14a.
99. "...Aten...". The stroke before the cartouche recalls *mswt-<sup>2</sup>tn*, found only on meat labels, COA III: 170-1. 2955. M10[79]. Figures 6.14, 14a.
100. "Year twelve, meat...h<sup>2</sup>yt...". Cf. no. 61. 3111. L14[12]. Figures 6.14, 14a.
101. End of a personal name ? 3146. L14[11]. Figures 6.14, 14a.
102. "...of Men[kheperu]re (?)...". Cf. no. 48. 3218. L16[14]. Figures 6.14, 14a.
103. "...may she live (?) of...". 3232. M12[126]. Figures 6.14, 14a.
104. Trace only. 3281. M12[126]. Figures 6.14, 14a.
105. Part of a cartouche on one line, and part of a personal name, -*mswt*-, below. 3294. M10[83]. Figures 6.14, 14a.



106. "Year...". **3339**. L16[15]. Figures 6.14, 14a.
107. Traces only, surface very badly flaked. **3454**. M12[126]. Figures 6.15, 15a.
108. "...River...". **3455**. M12[125]. Figures 6.15, 15a.
109. "Year ten + x ...River...". **3520**. N9[52]. Figures 6.15, 15a.
110. "Year one, *ušj(?)*...". Cf. *COA* III: Plate XCVI, no. 301. **3548 + 3549**. Both 16[100]. Figures 6.15, 15a.
111. "Year seventeen...". **3561**. J7[106]. Figures 6.15, 15a.
112. "Year...*mr[ht]* oil(?)...". **3575**. M12[126]. Figures 6.15, 15a.
113. "Year...". **3598**. L16[141]. Figures 6.15, 15a.
114. "...Western River...". **3642**. M12[126]. Figures 6.15, 15a.
115. "...River...". **3670**. M12[126]. Figures 6.15, 15a.
116. "...Western River...". **3672**. M12[126]. Figures 6.16, 16a.
117. "...River...". **3694**. M12[121]. Figures 6.16, 16a.
118. "Year one (?), wine...". **3696**. M12[127]. Figures 6.16, 16a.
119. Part of a personal name, *Pi-itn-m...?* Cf. *COA* III: 177. **3697**. M12[95]. Figures 6.16, 16a.
120. "...Western River...". **3698**. M12[95]. Figures 6.16, 16a.
121. "...Tiye, may she live...". For the estate of Tiye on Amarna labels, see *COA* III: 200. **3699**. M12[127]. Figures 6.16, 16a.
122. "...Western River...". **3702**. M12[127]. Figures 6.16, 16a.
123. Traces only. **3703**. M12[127]. Figures 6.16, 16a.
124. "...Western River(?)...". **3708**. M12[95]. Figures 6.16, 16a.
125. End of personal name, *-iy*. **3839**. J8[169]. Figures 6.17, 17a.
126. End of a line. **3840**. M12[95]. Figures 6.17, 17a.
127. "Year (?)...". **3846**. H8[206]. Figures 6.17, 17a.

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128. "Year seven...*hry ks[mw]*..." 3975. M16(fallen baulk on east). Figures 6.17, 17a.

129. "Year thirteen, wine...of the..." 29. Surface, Central City. Figures 6.17, 17a.

130. "*Mrh̄t* oil..." 32. Surface, Central City. Figures 6.17, 17a.

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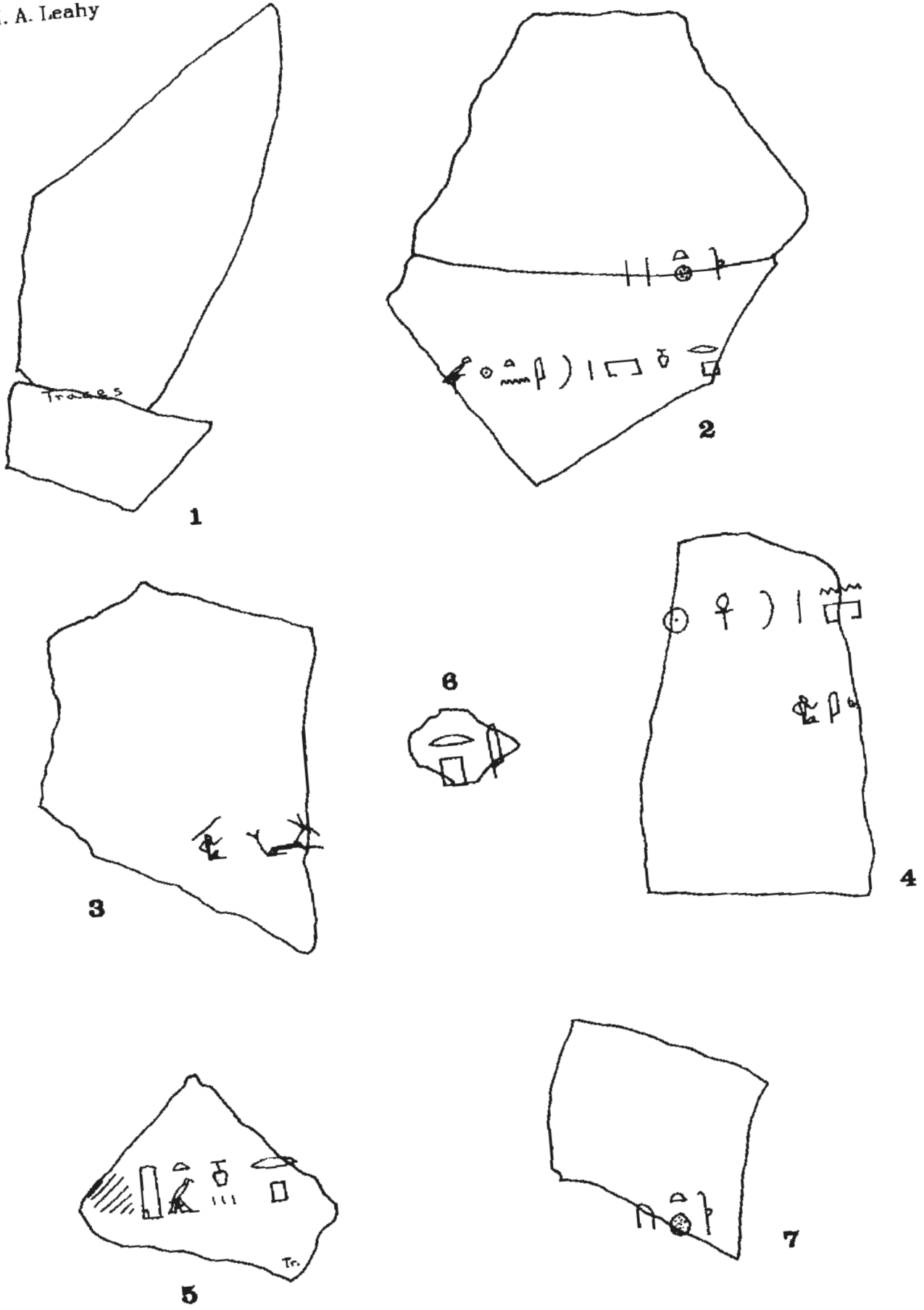


Figure 6.1.

Hieratic labels

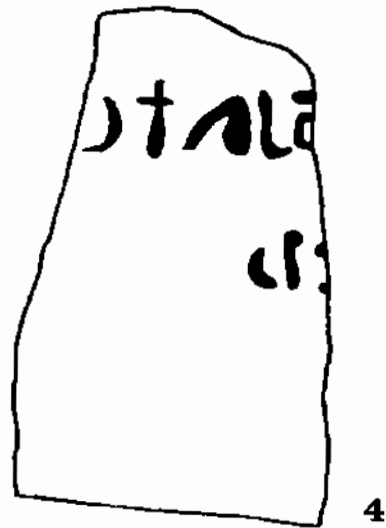
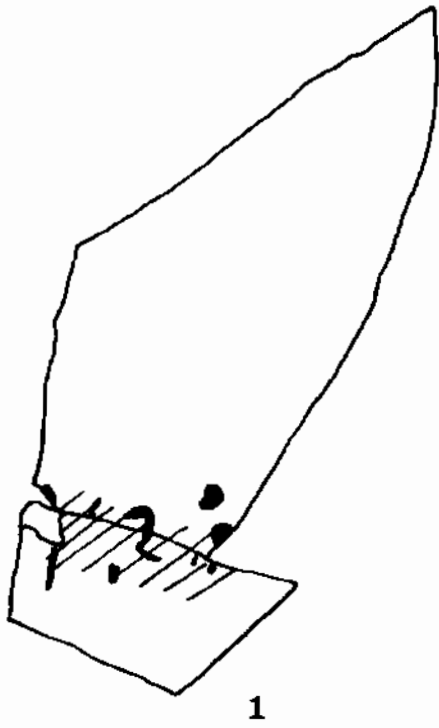


Figure 6.1a.



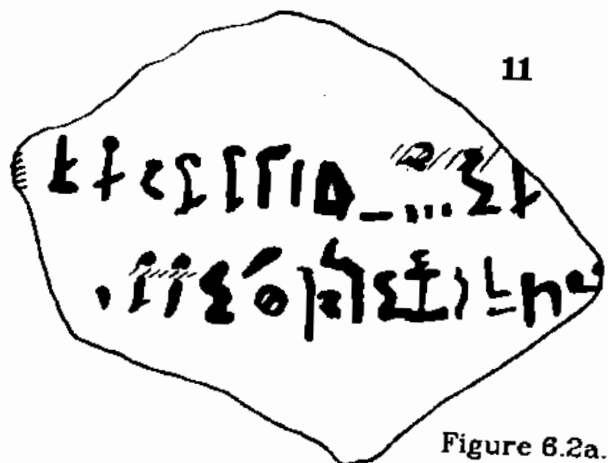
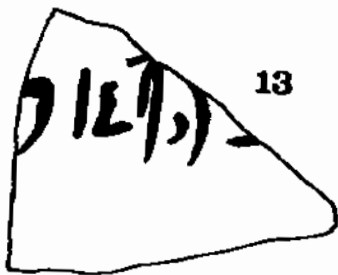
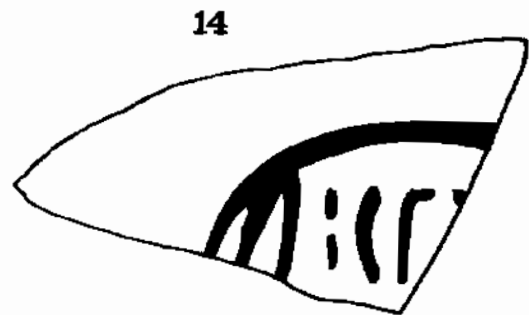
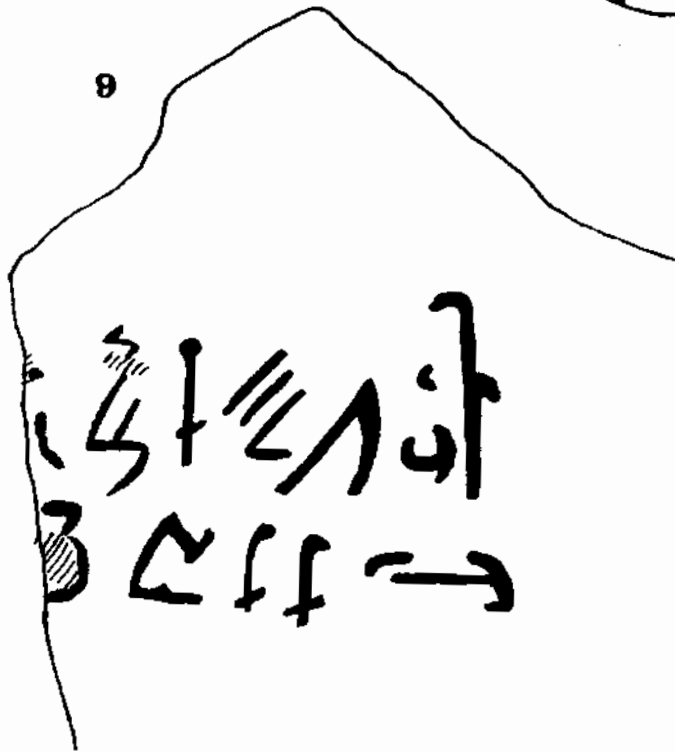
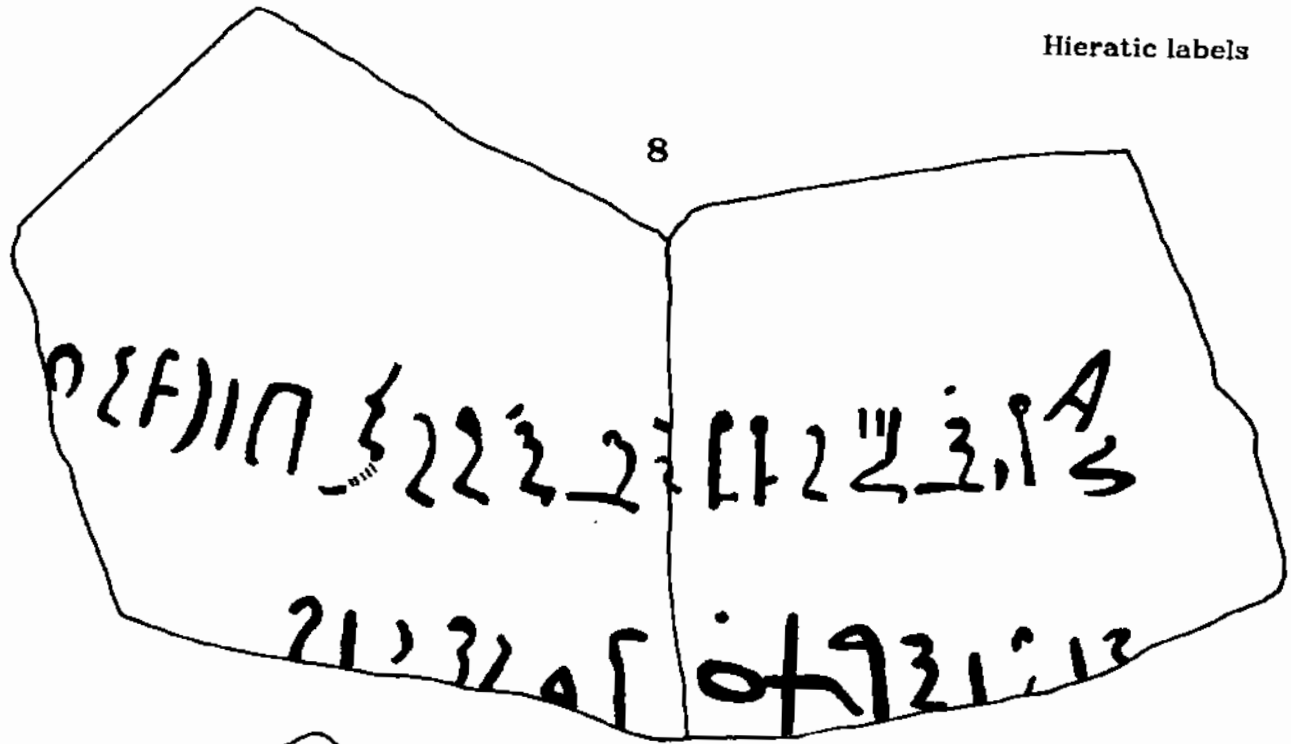


Figure 6.2a.

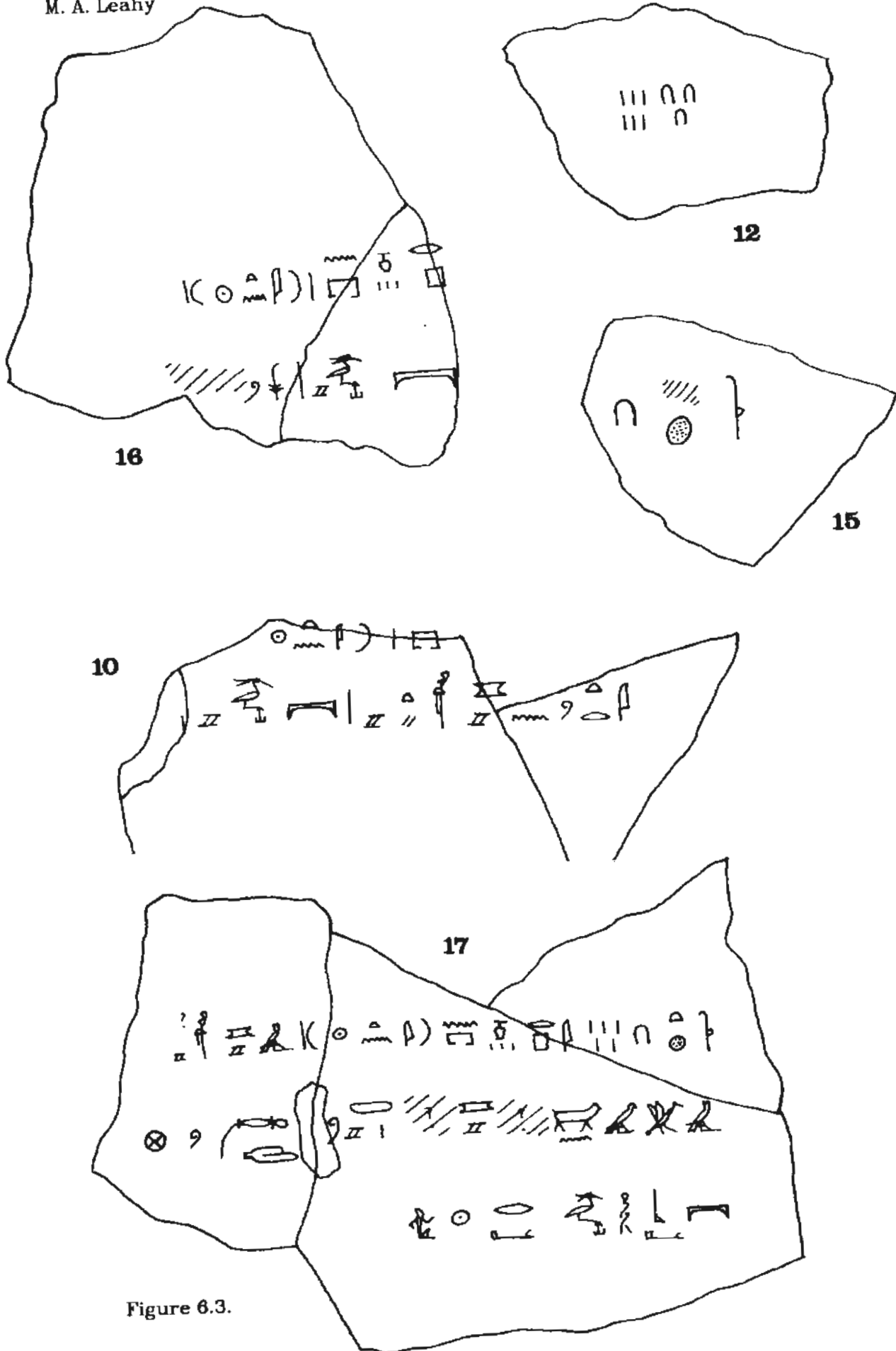


Figure 6.3.





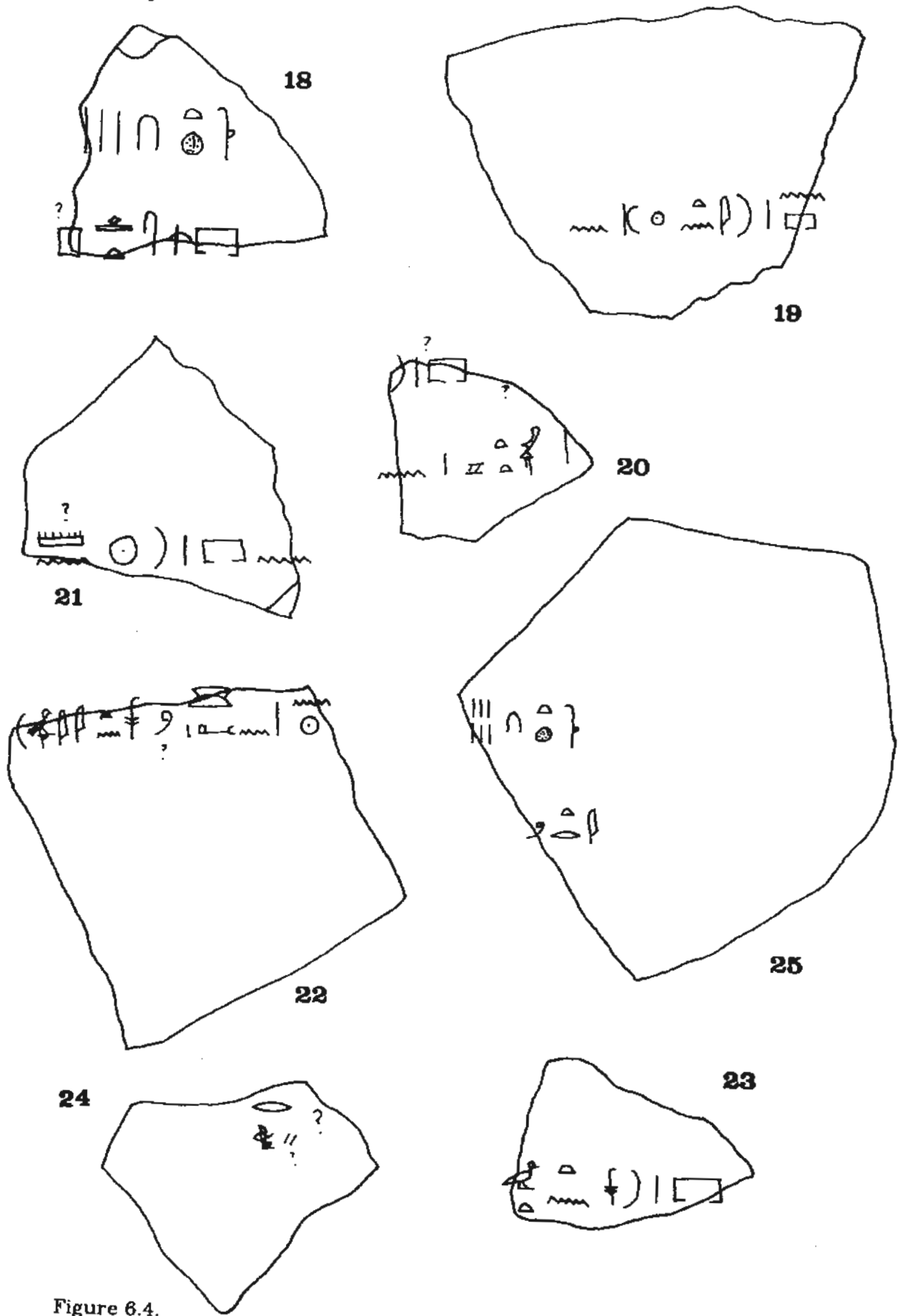
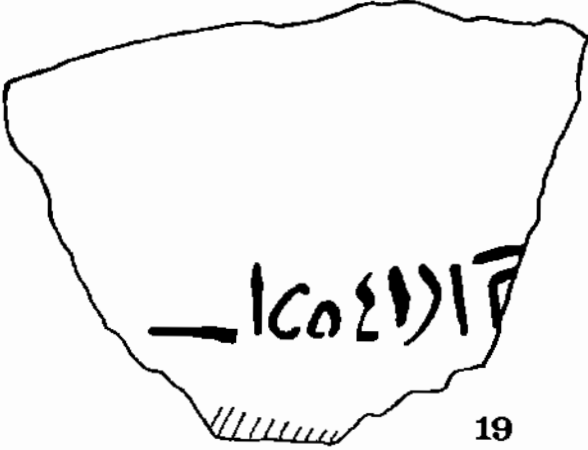


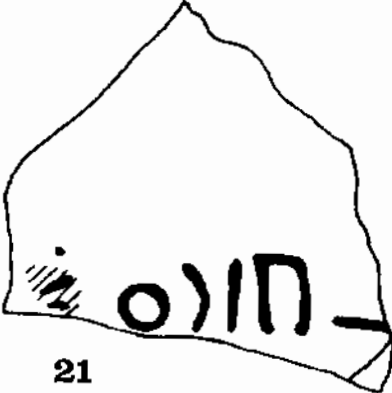
Figure 6.4.



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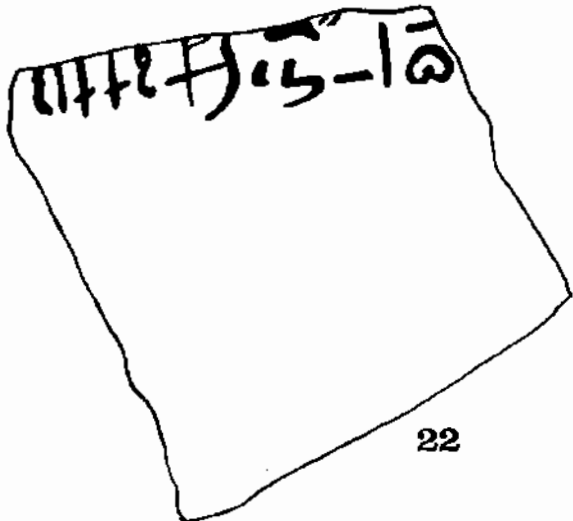
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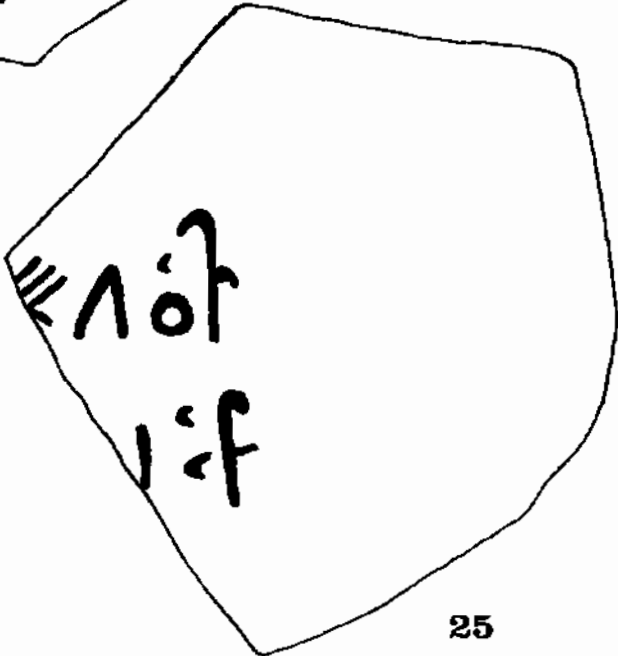
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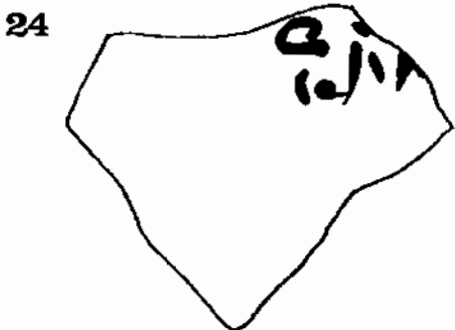
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Figure 6.4a.

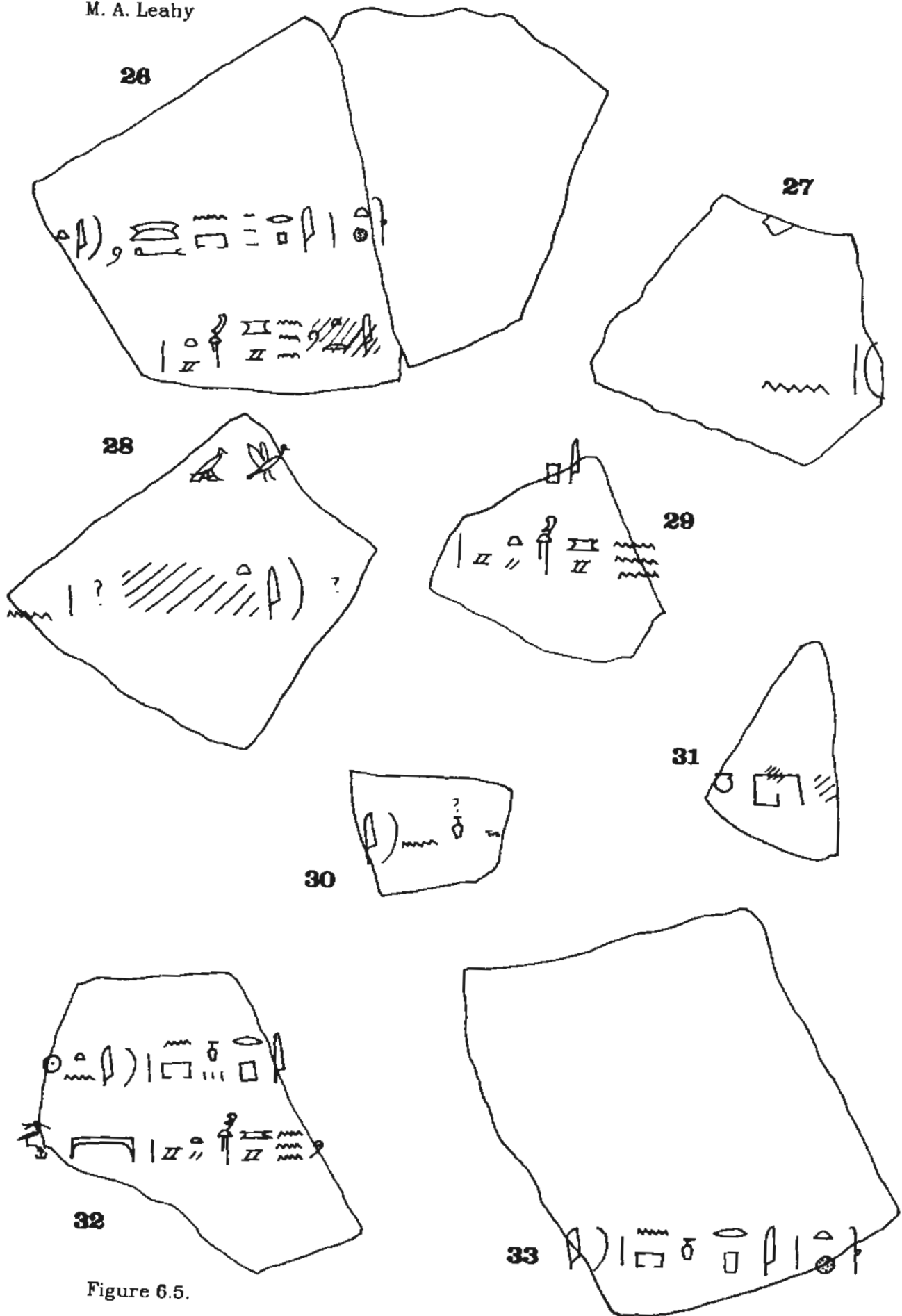


Figure 6.5.

Hieratic labels

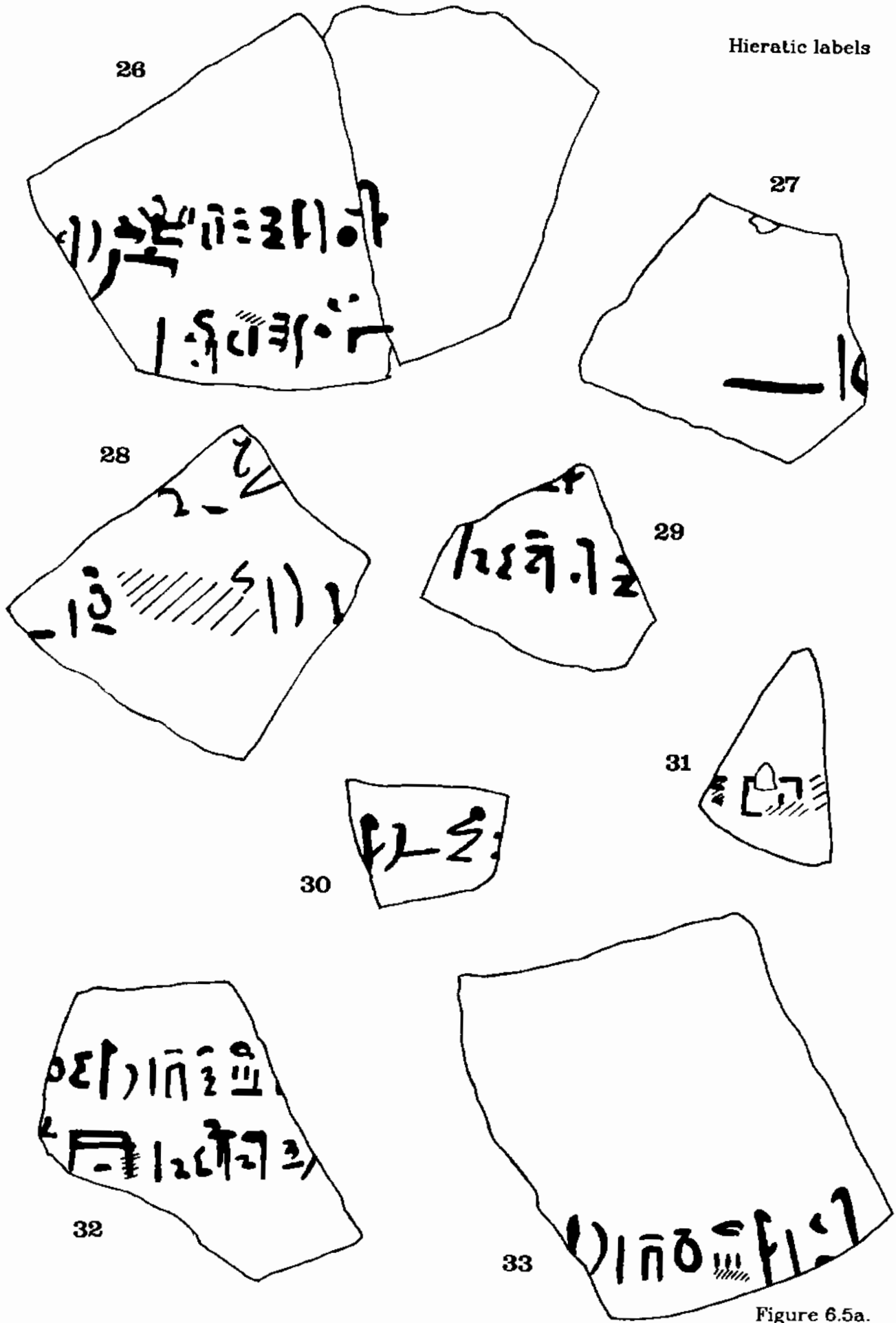


Figure 6.5a.

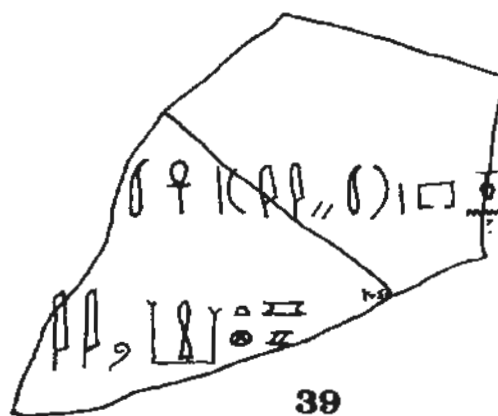
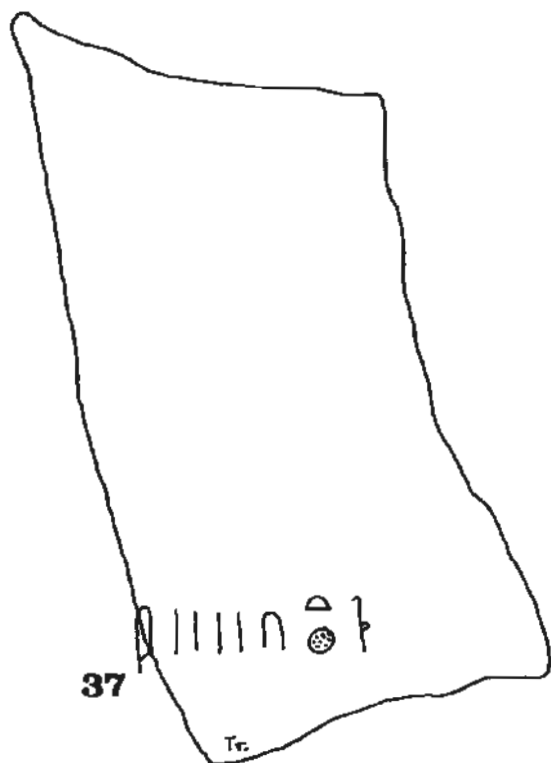
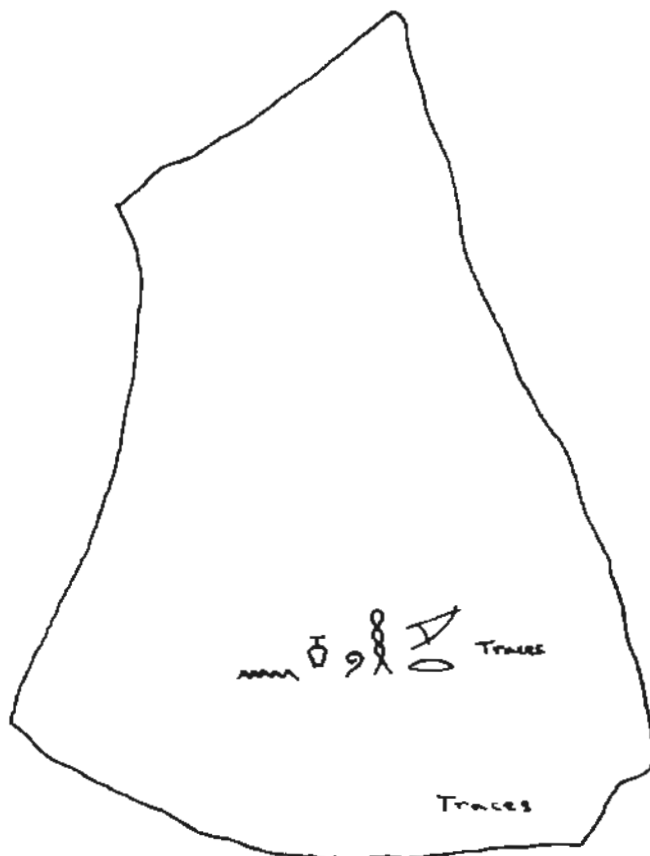
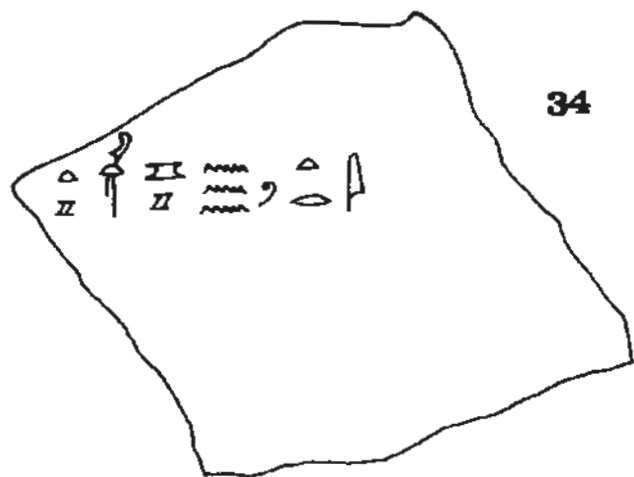
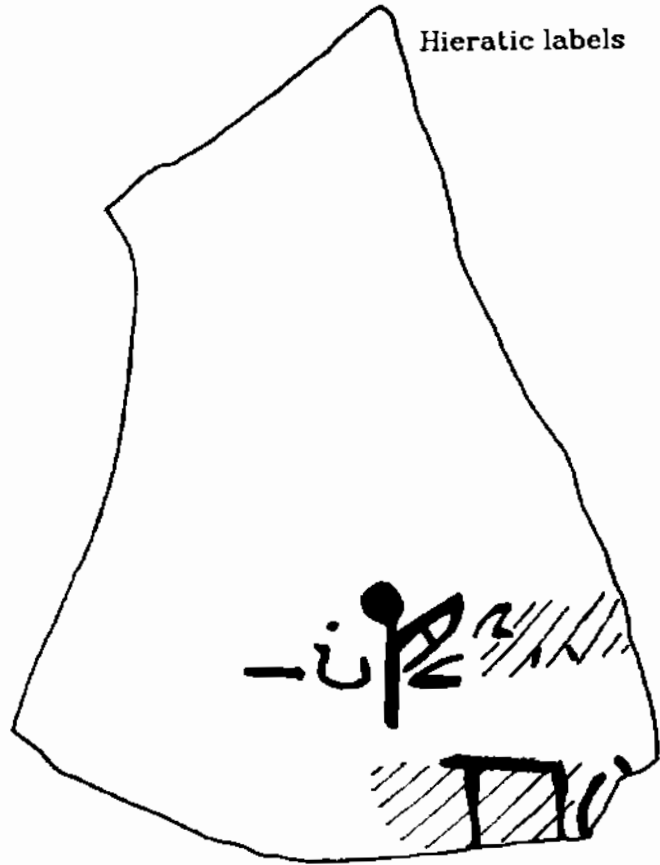


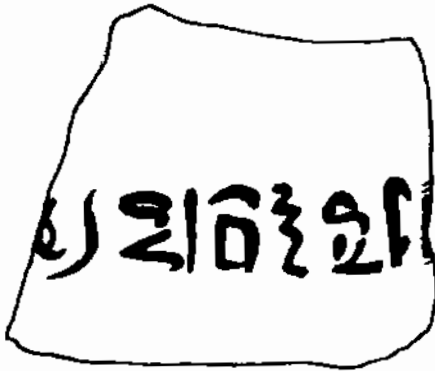
Figure 6.6.



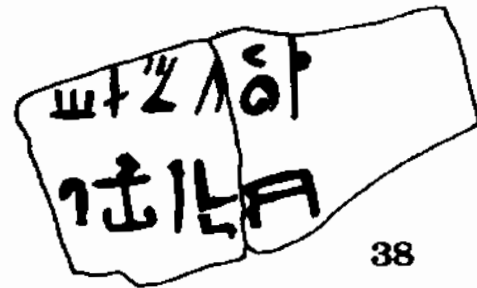
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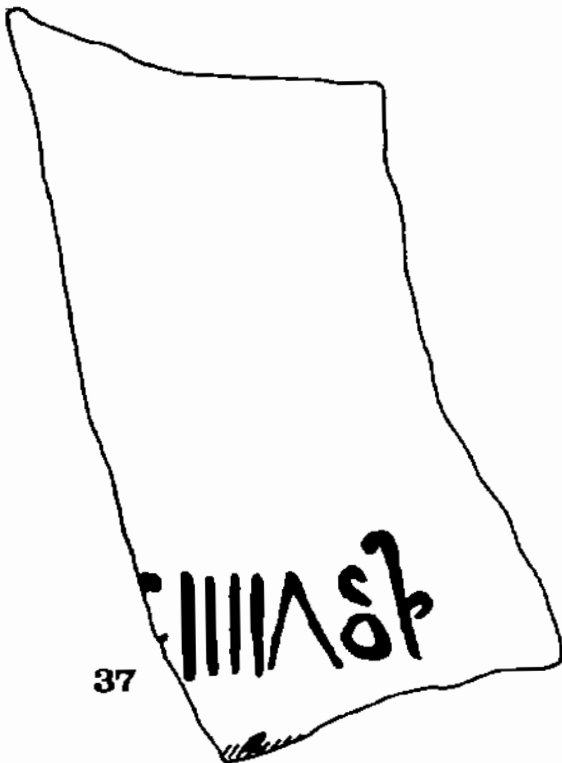
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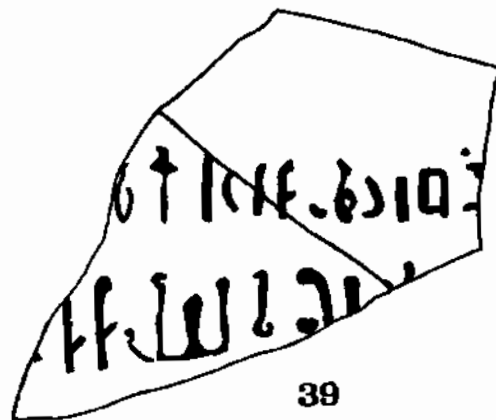
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Figure 6.6a.

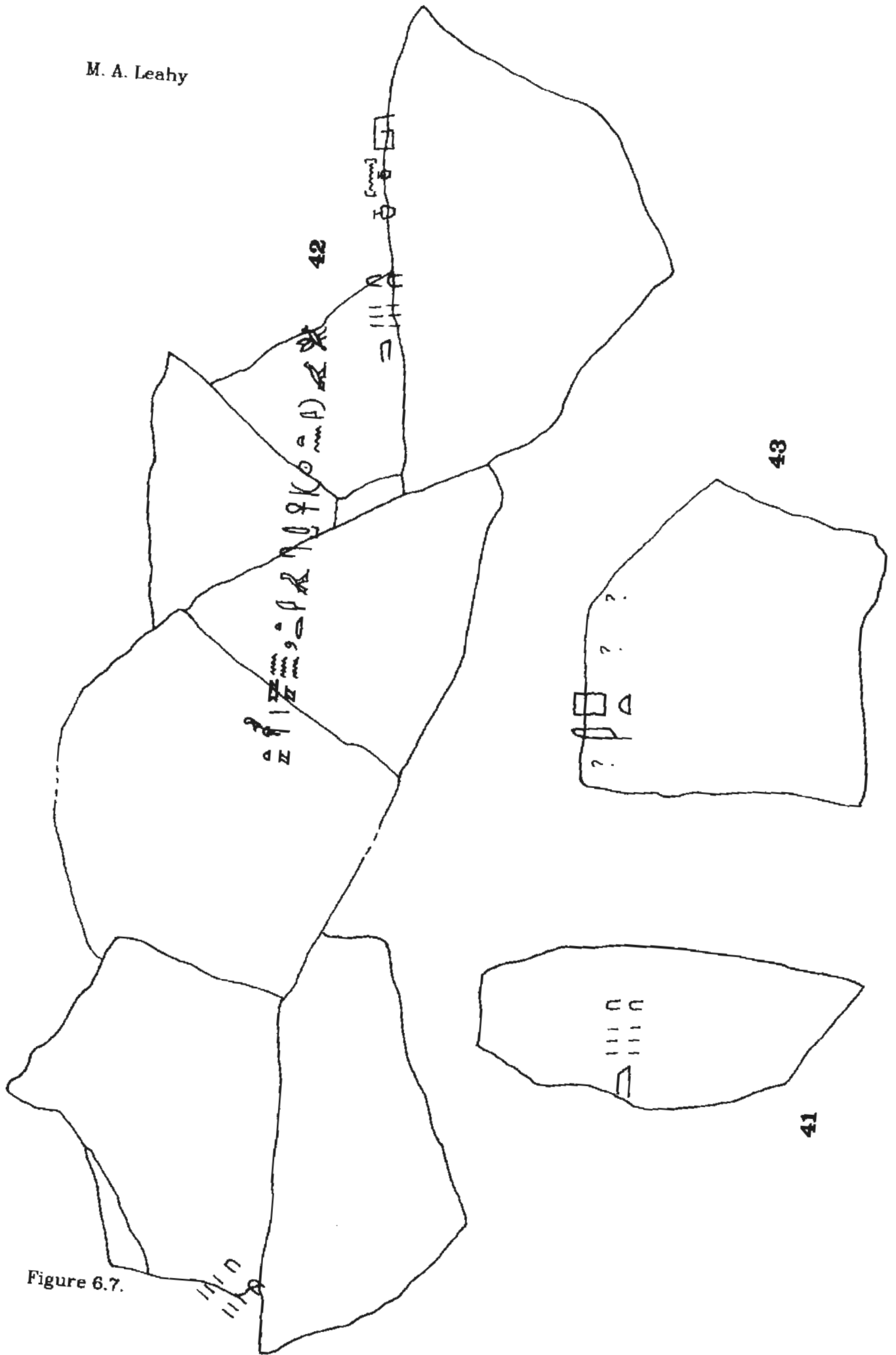


Figure 6.7.



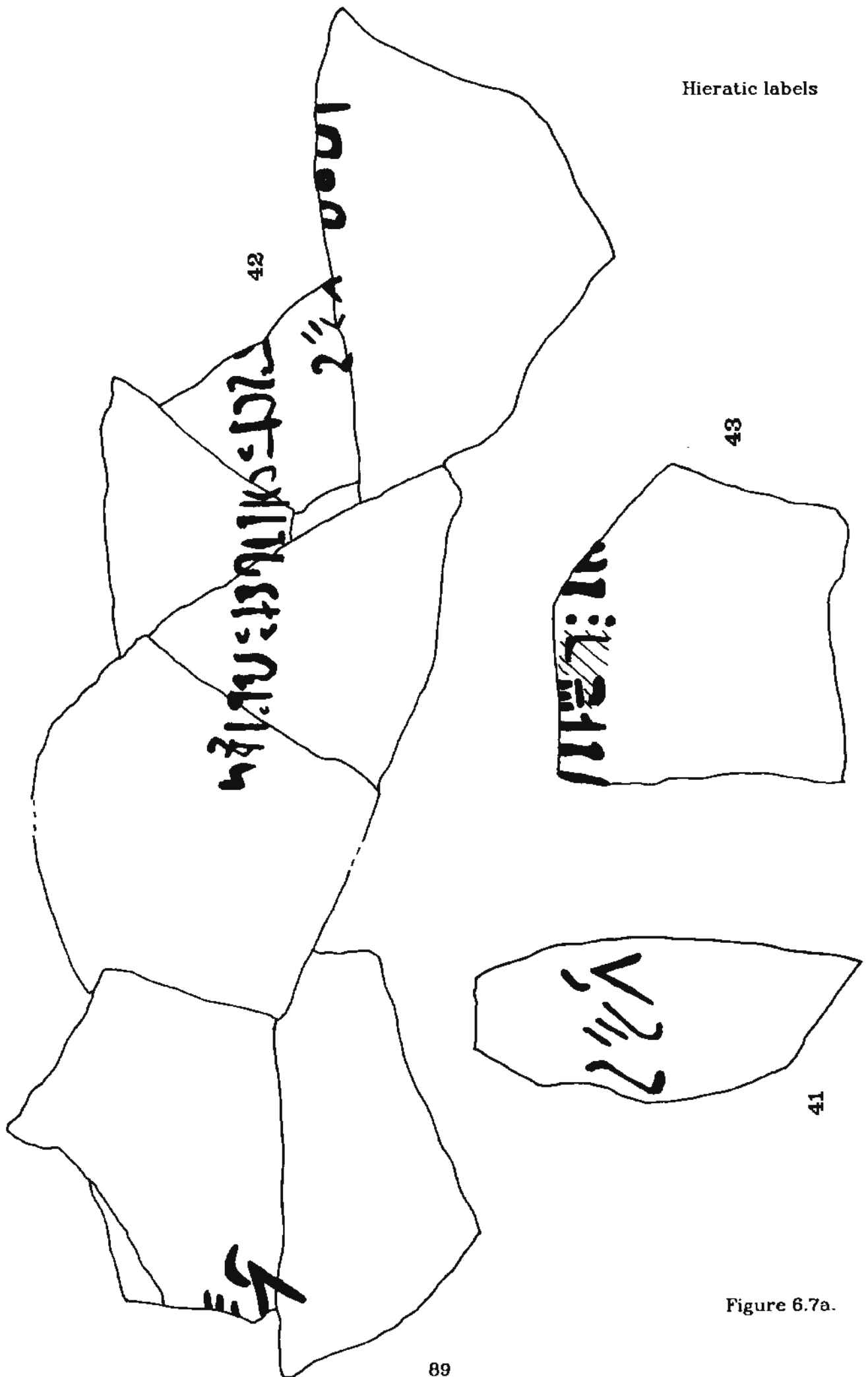


Figure 6.7a.

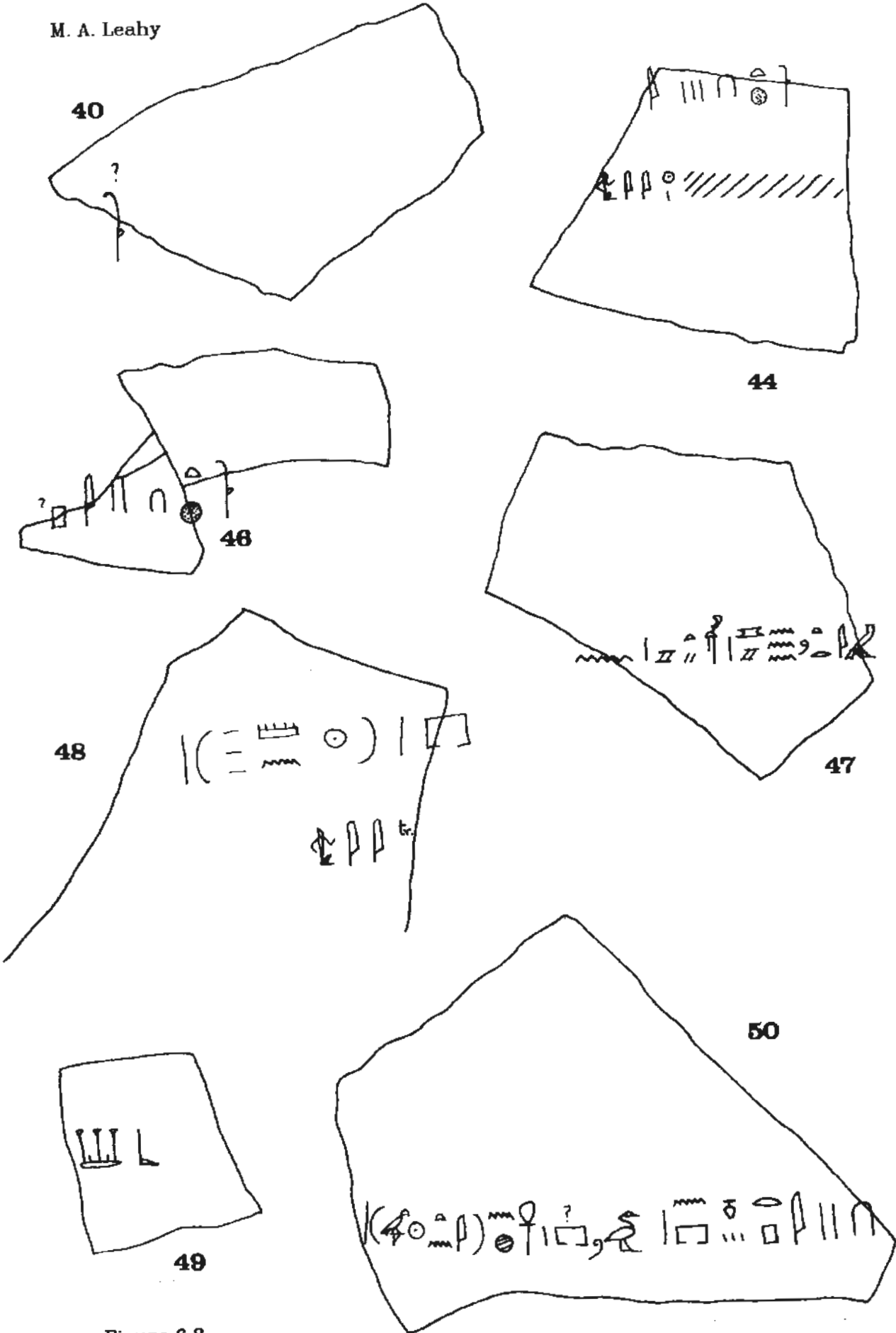
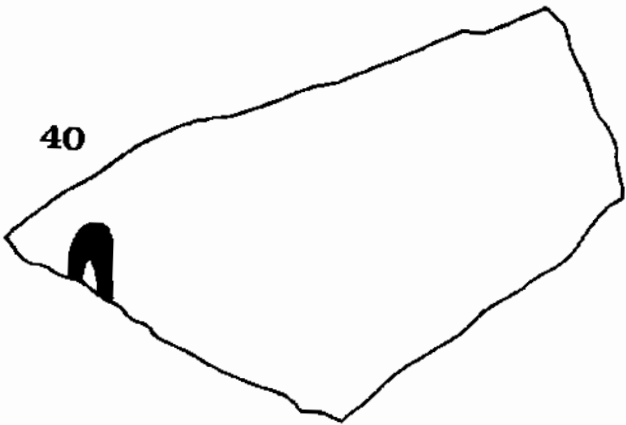


Figure 6.8.

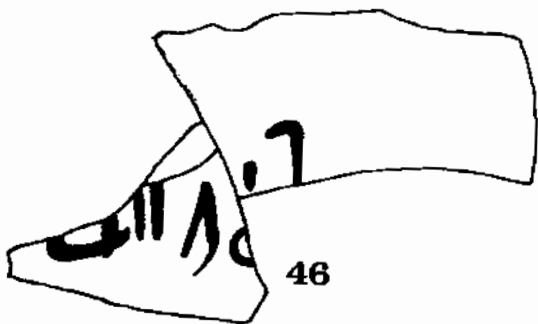
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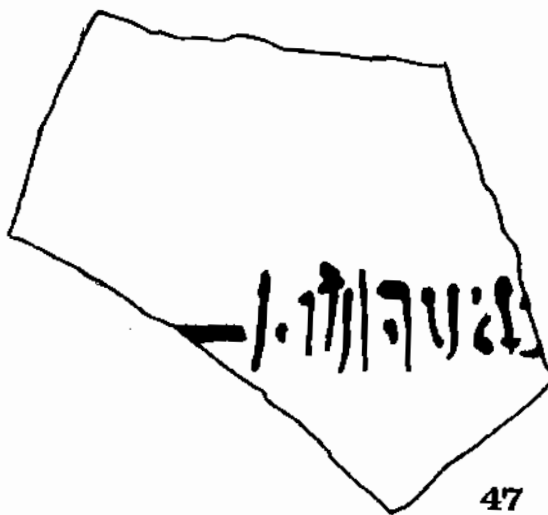
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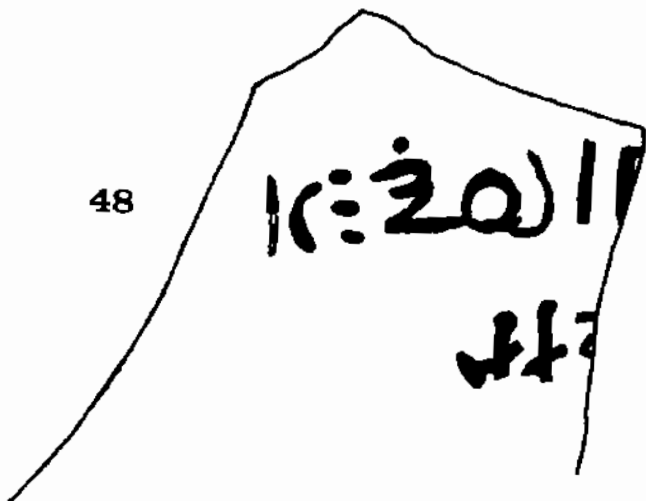
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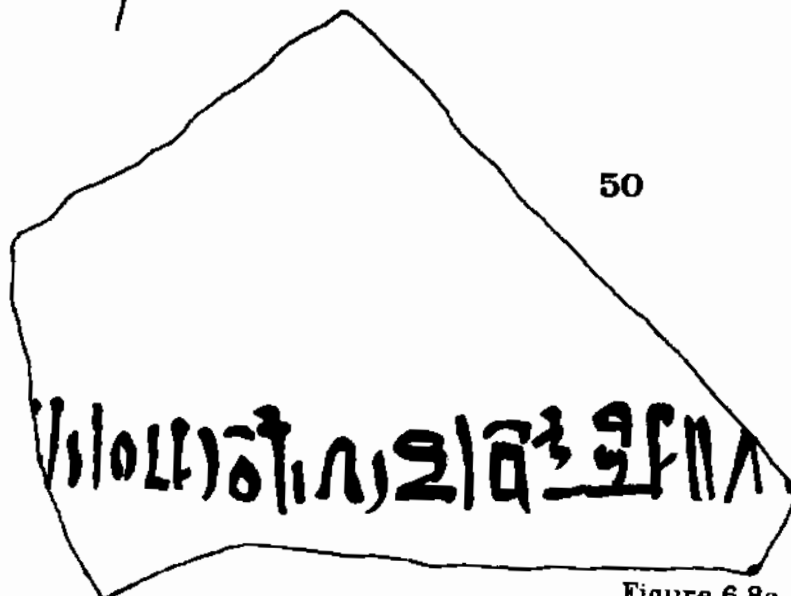
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Figure 6.8a.

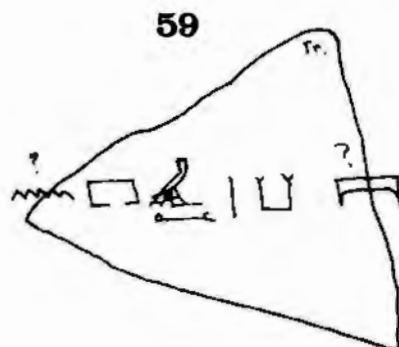
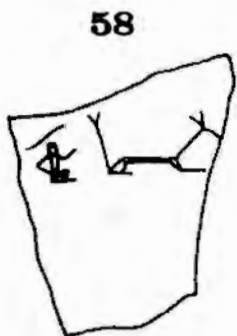
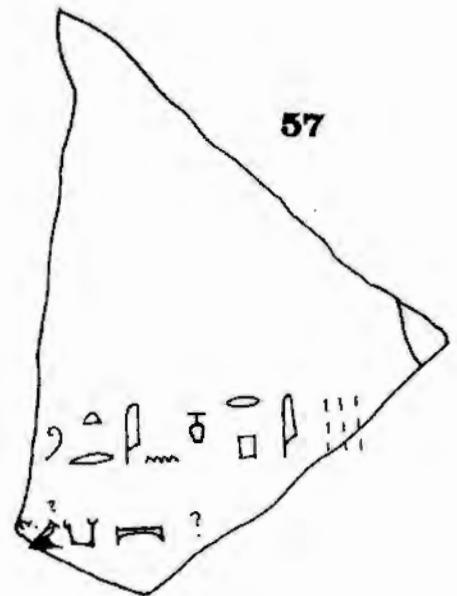
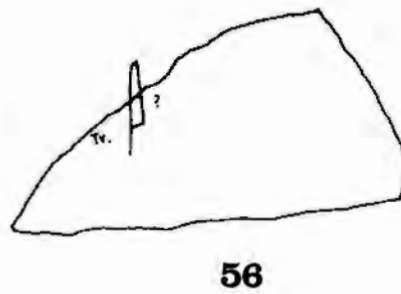
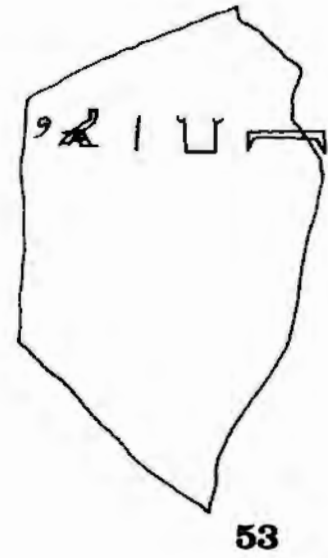
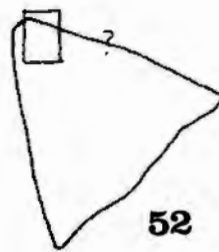
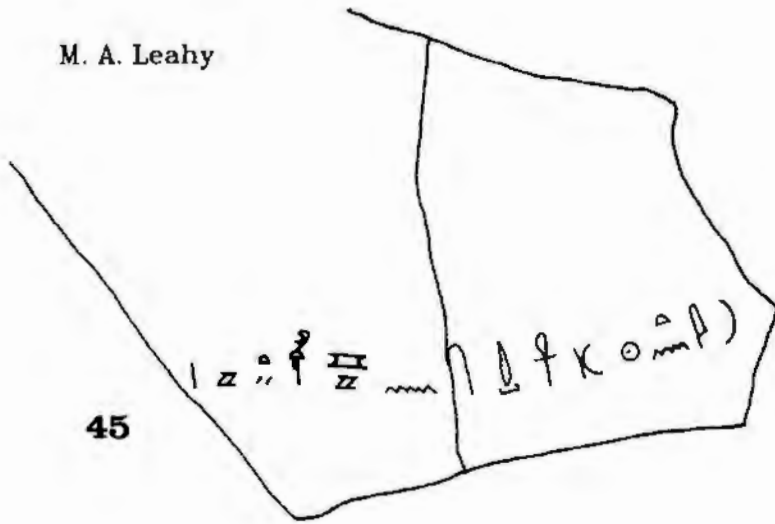
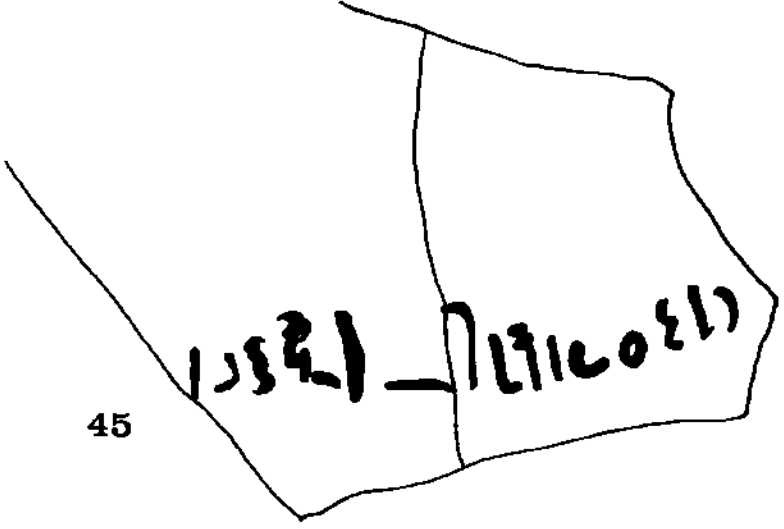


Figure 6.9.

Hieratic labels



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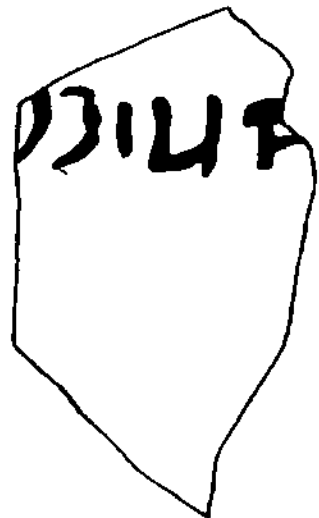
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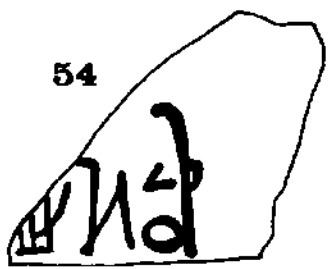
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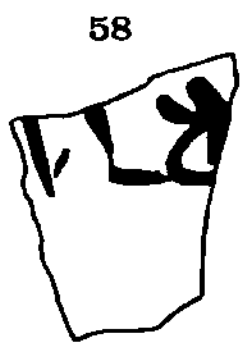
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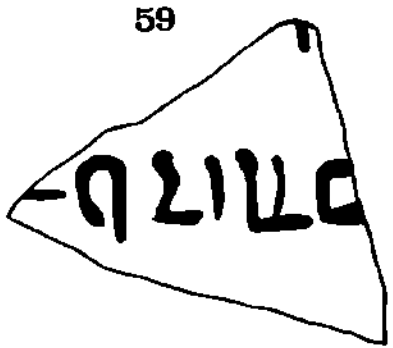
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Figure 6.9a.

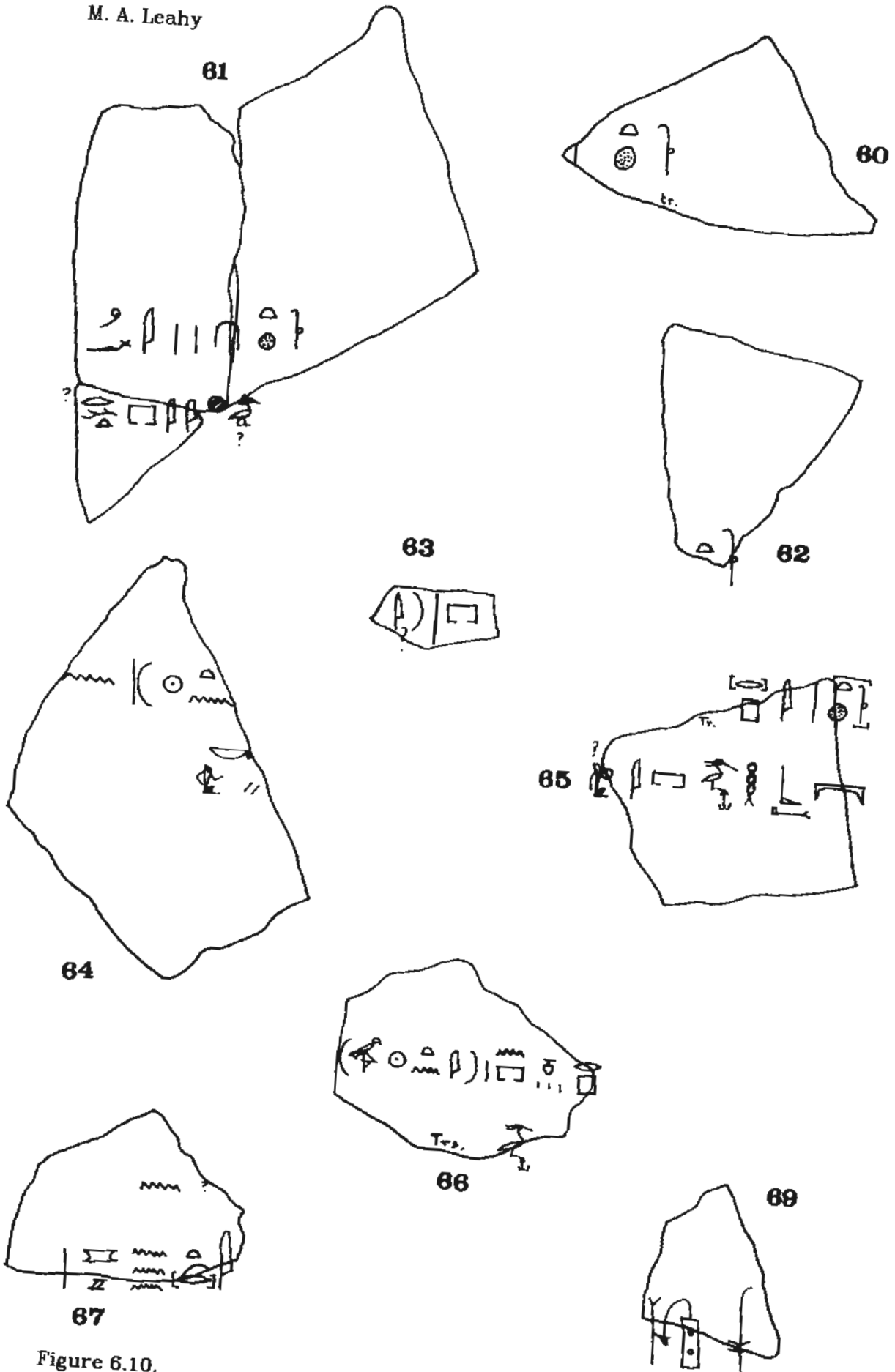


Figure 6.10.

Hieratic labels

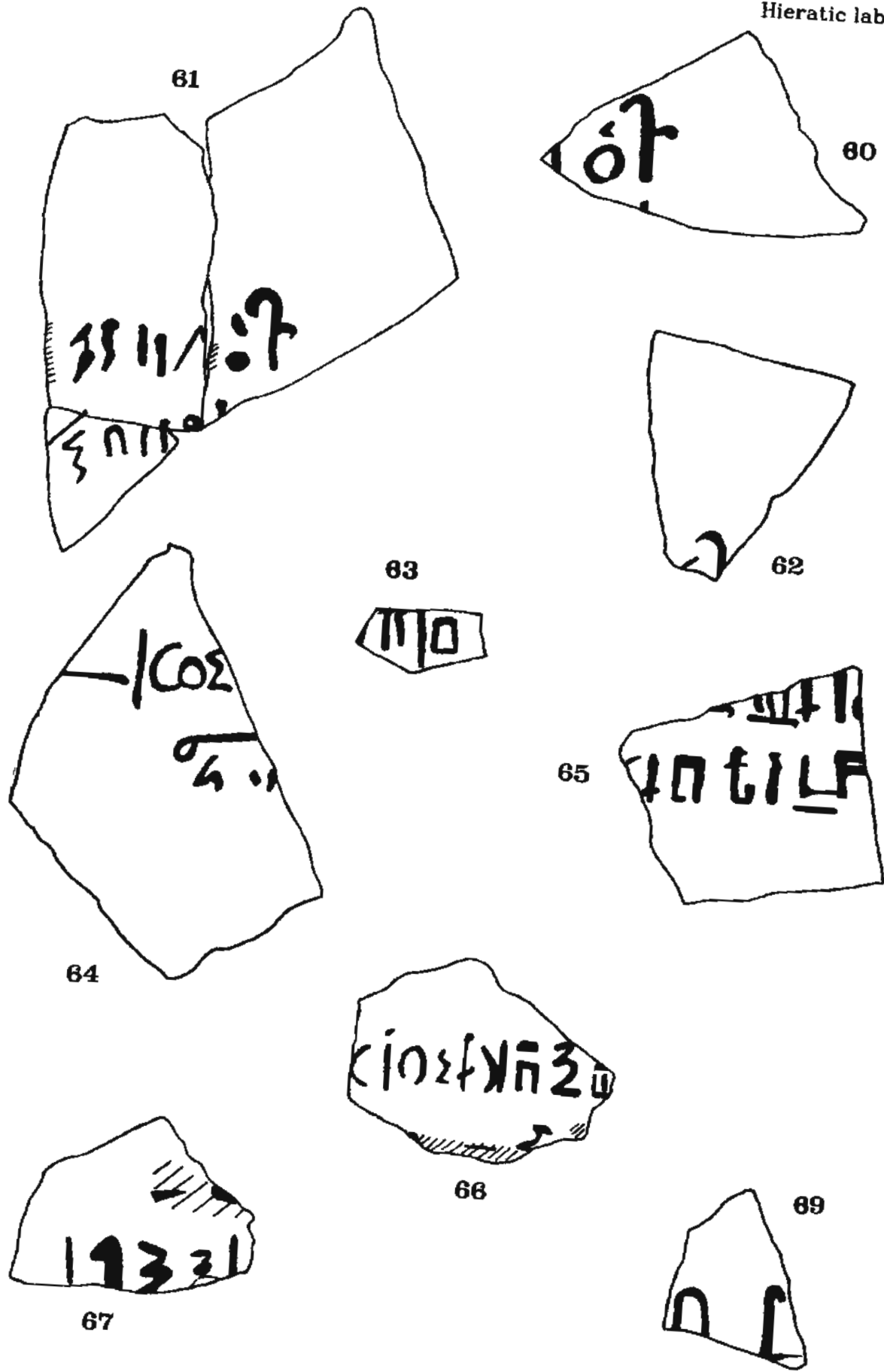


Figure 6.10a.

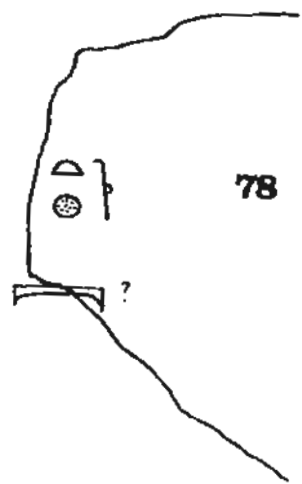
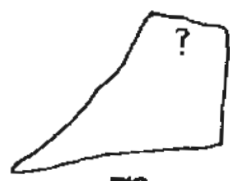
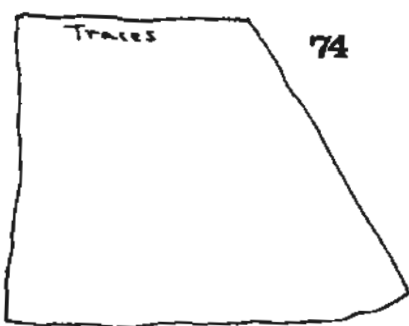
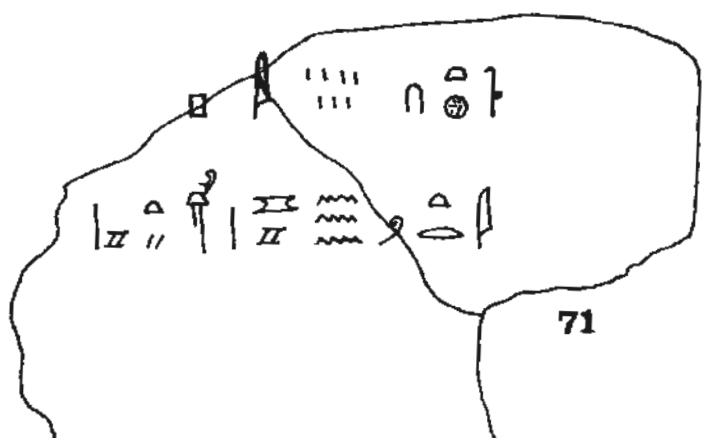
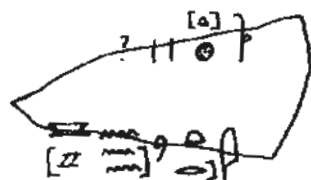


Figure 6.11.

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Hieratic labels

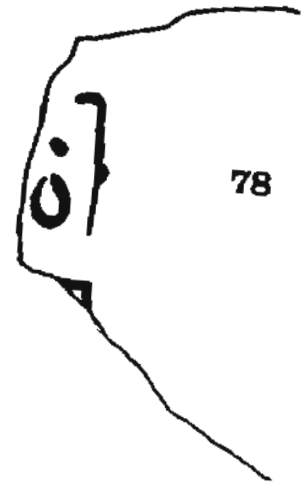
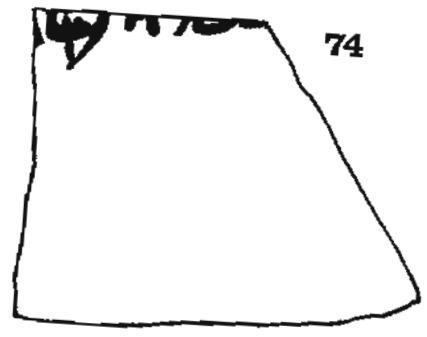
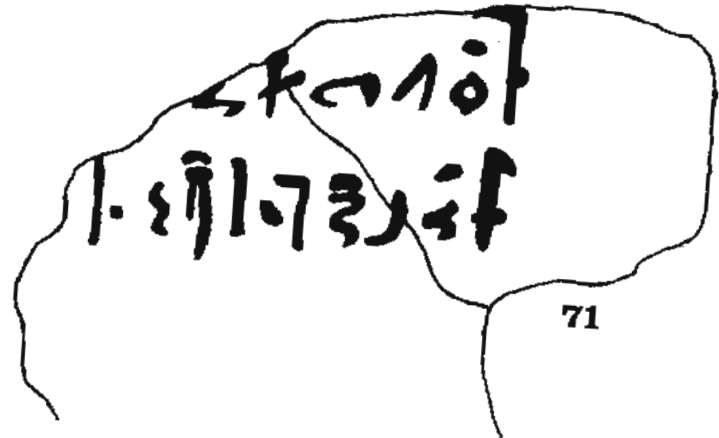
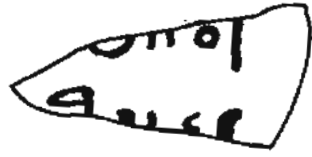
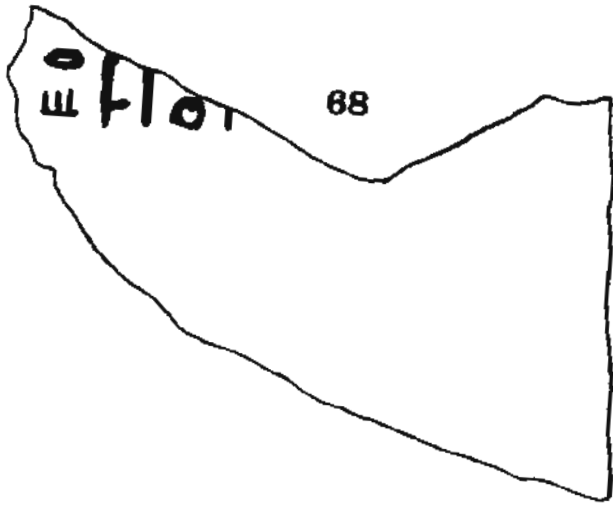


Figure 6.11a

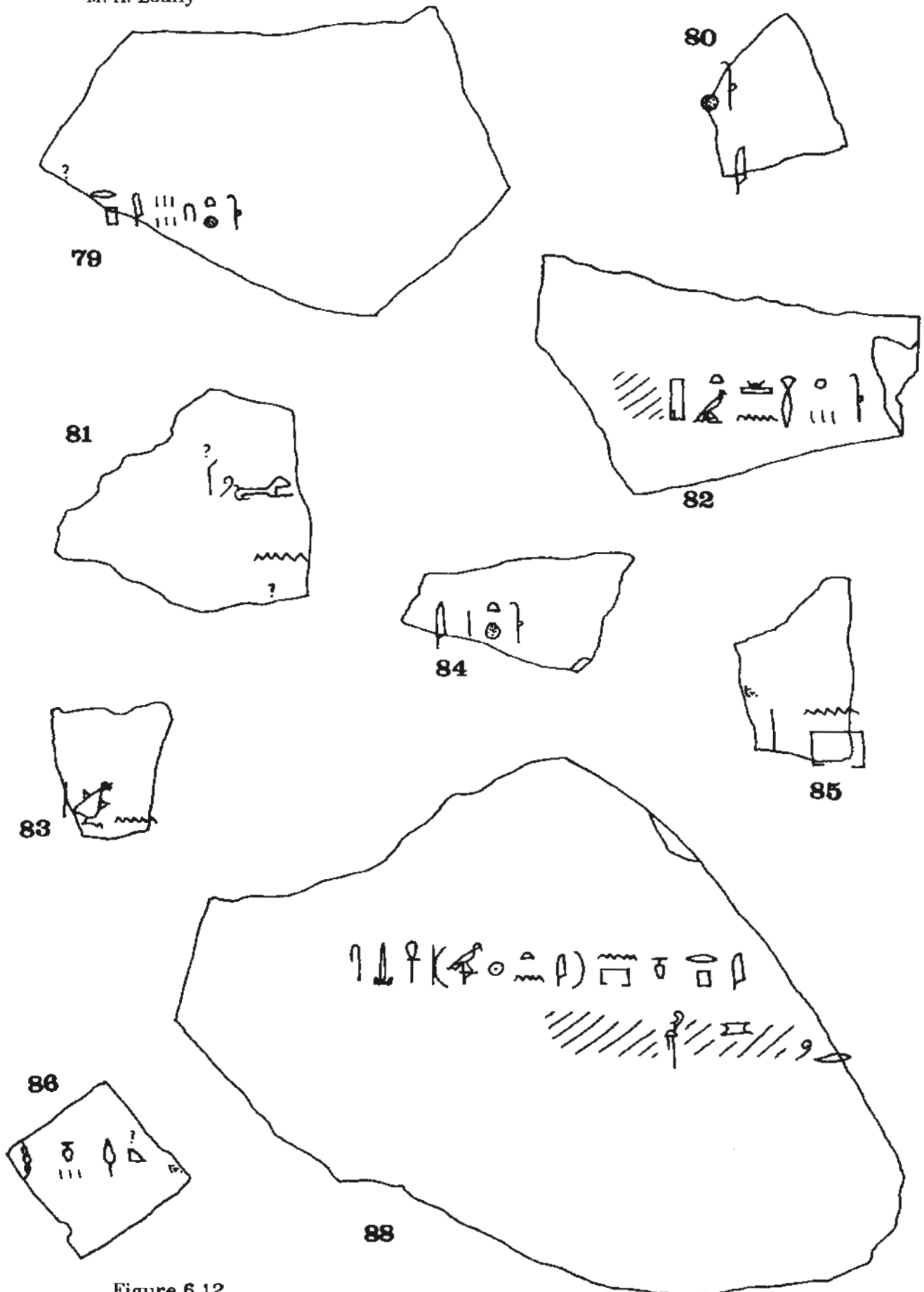


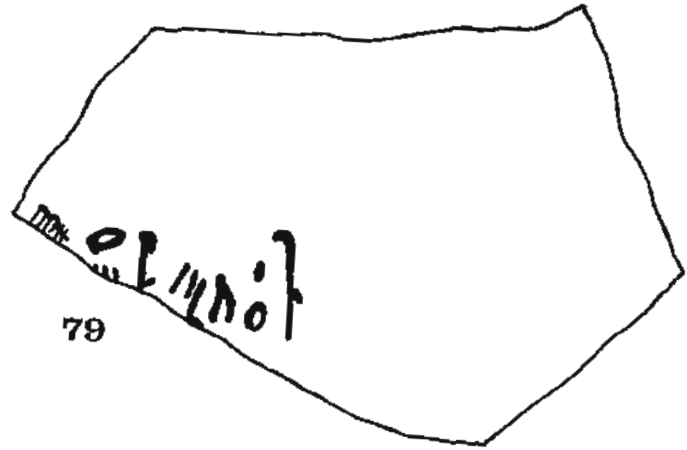
Figure 6.12.

Hieratic labels

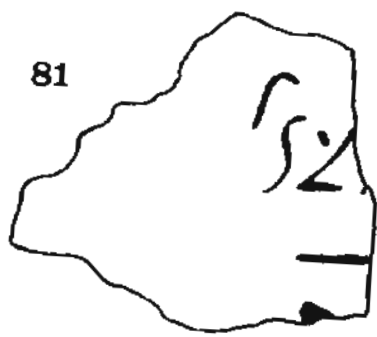
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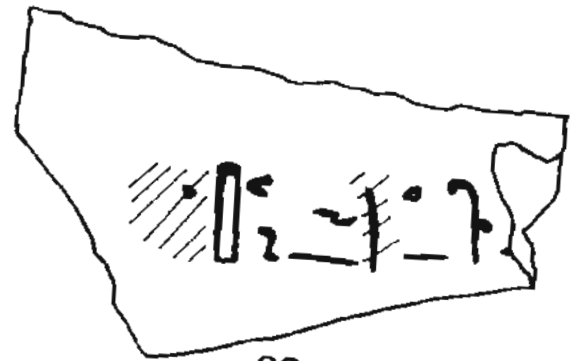
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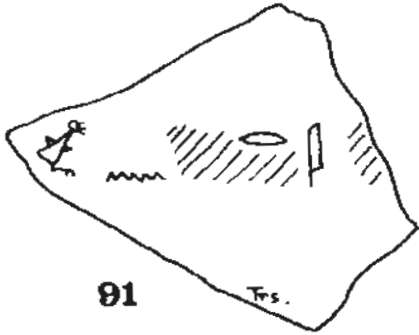
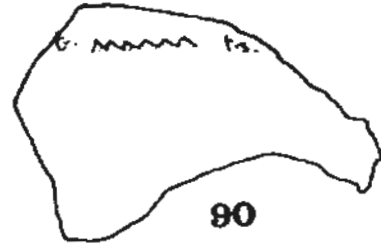
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Figure 6.12a.

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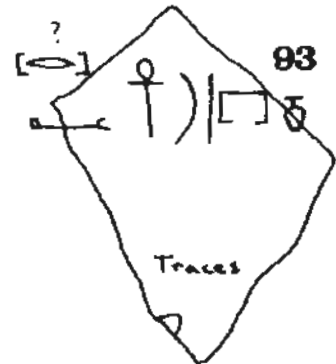
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Trs.

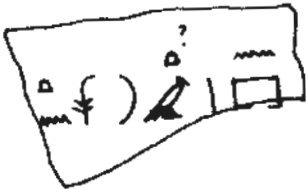
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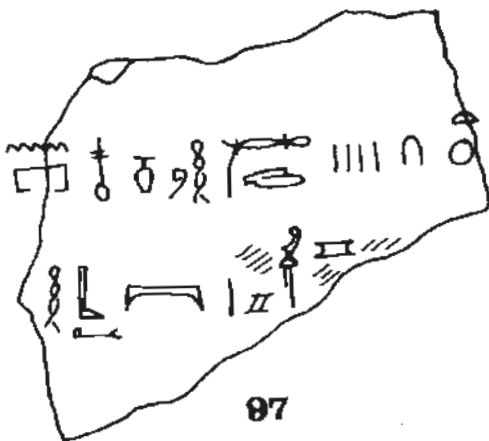
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Traces

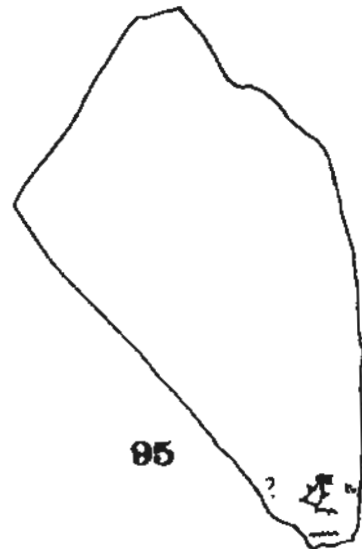
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Figure 6.13.

Hieratic labels

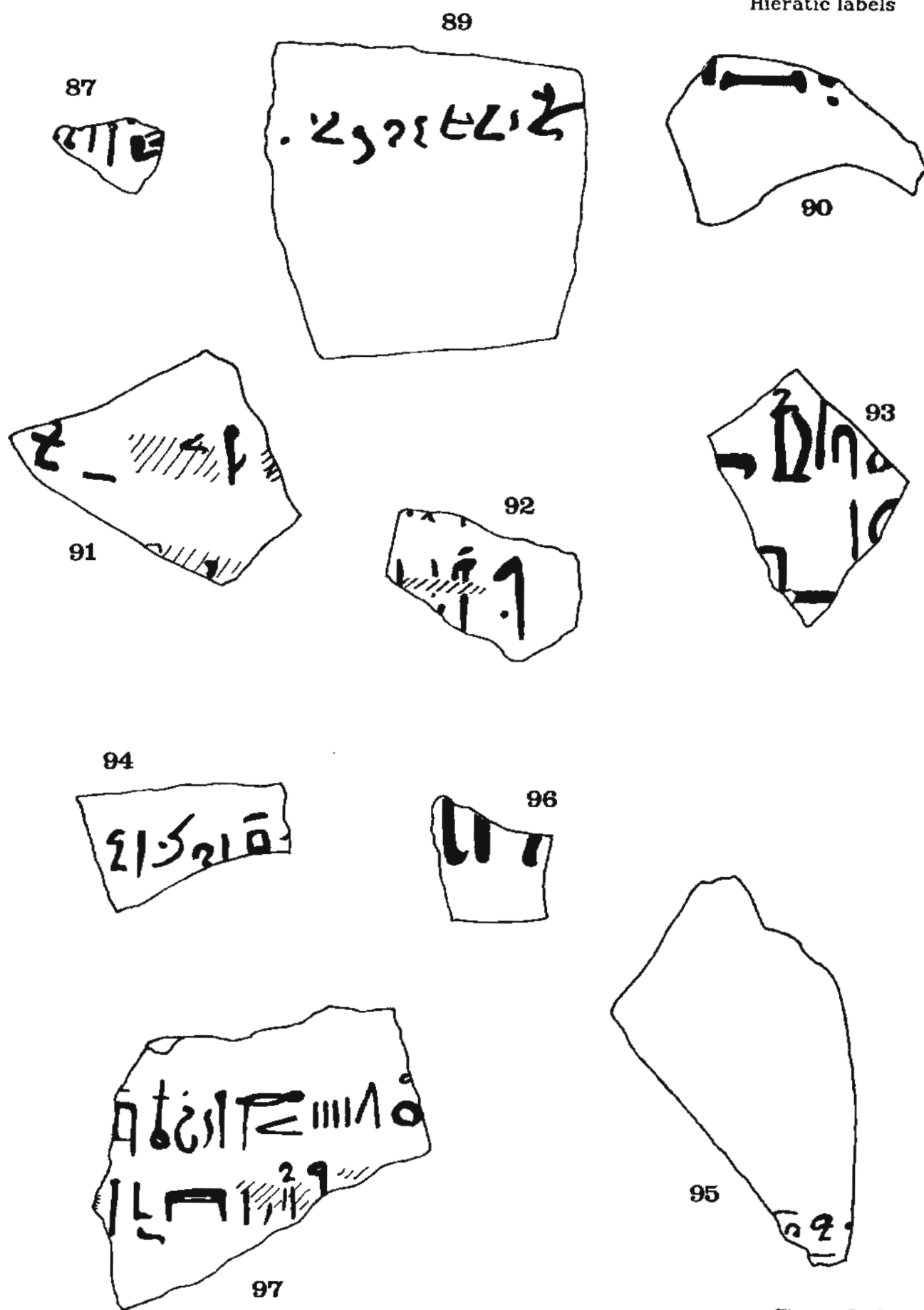
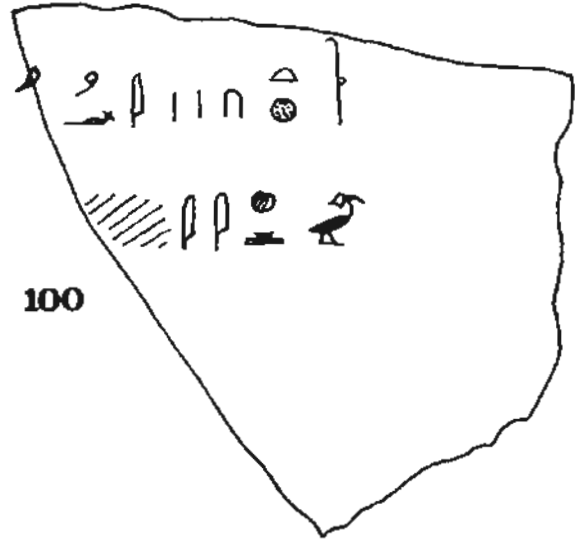
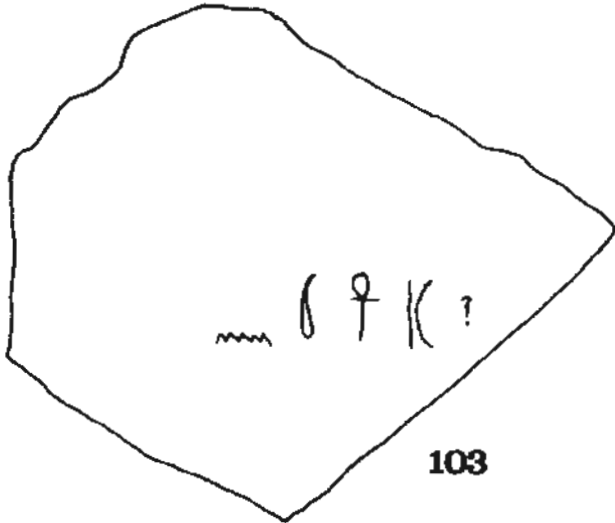


Figure 6.13a.

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100



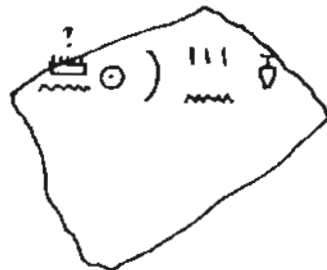
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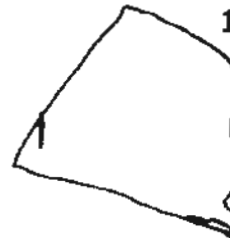
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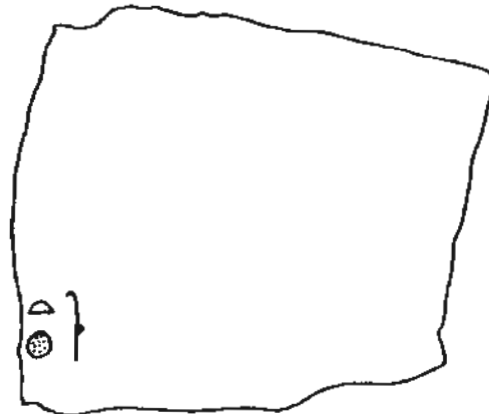
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104



105



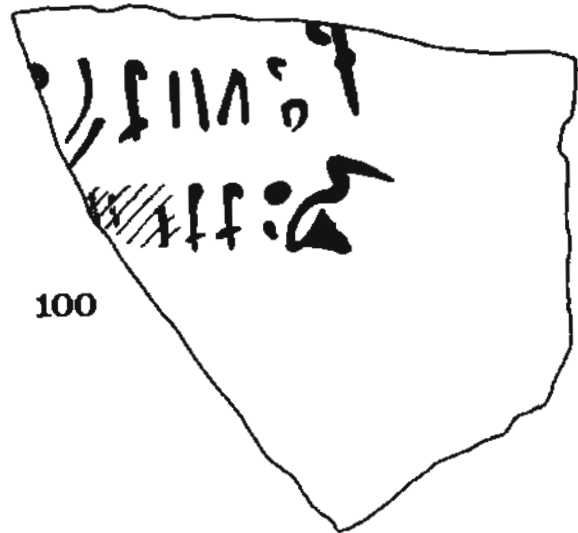
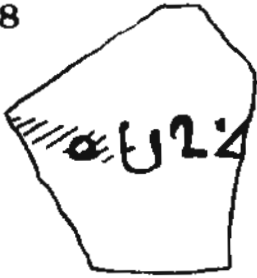
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102

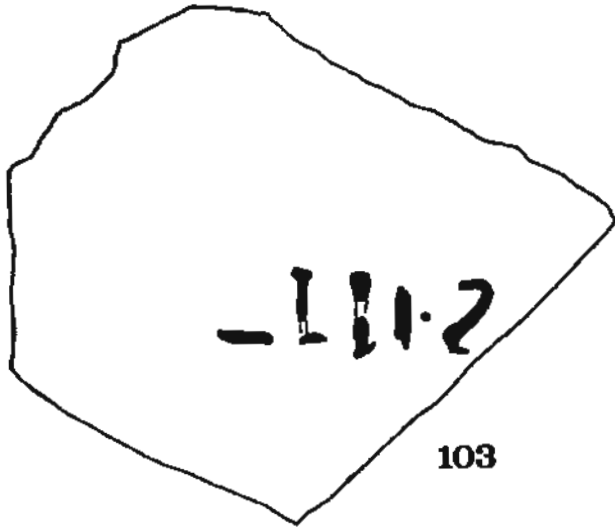
Figure 6.14.

Hieratic labels

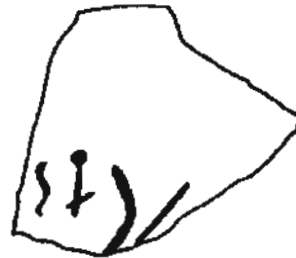
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100



103



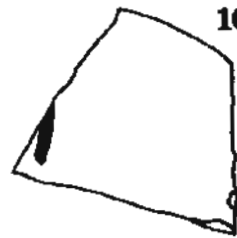
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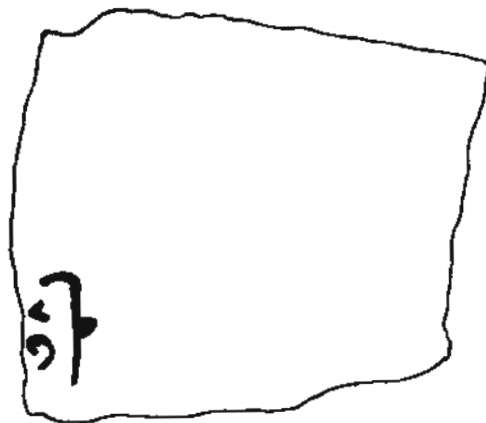
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Figure 6.14a.

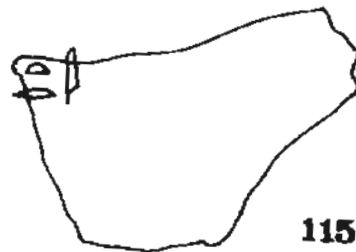
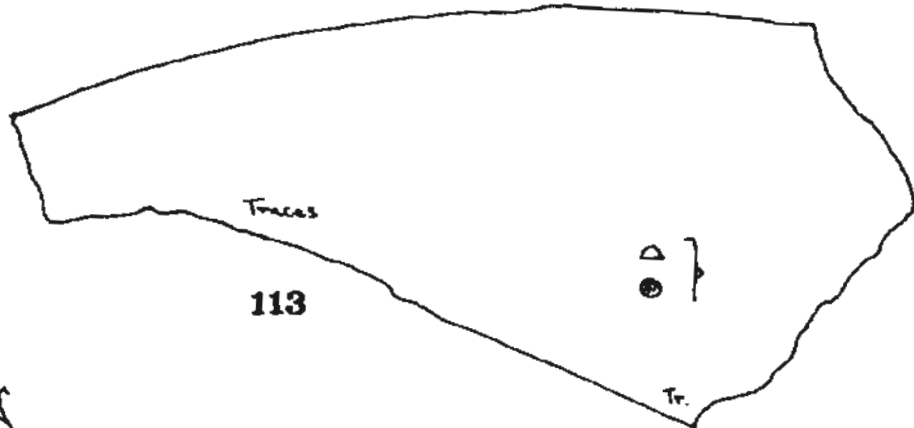
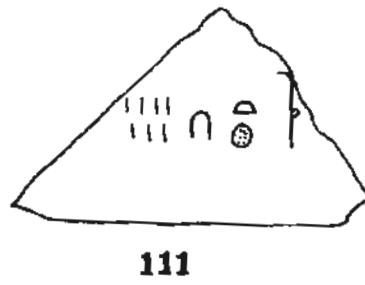
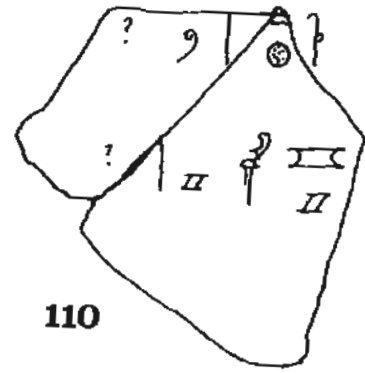
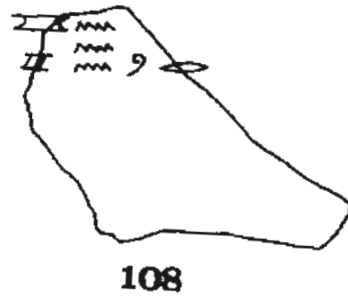


Figure 8.15.



Hieratic labels

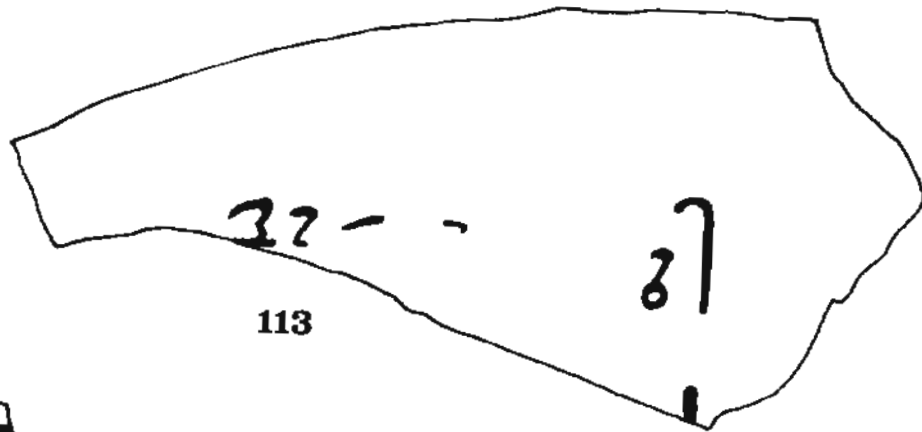
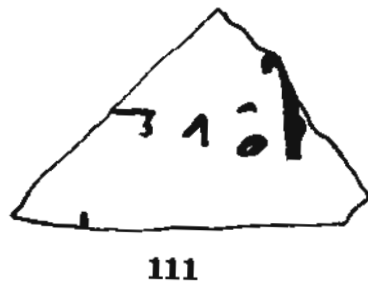
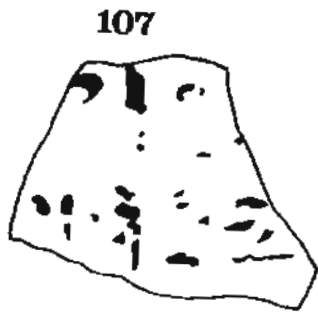


Figure 6.15a.

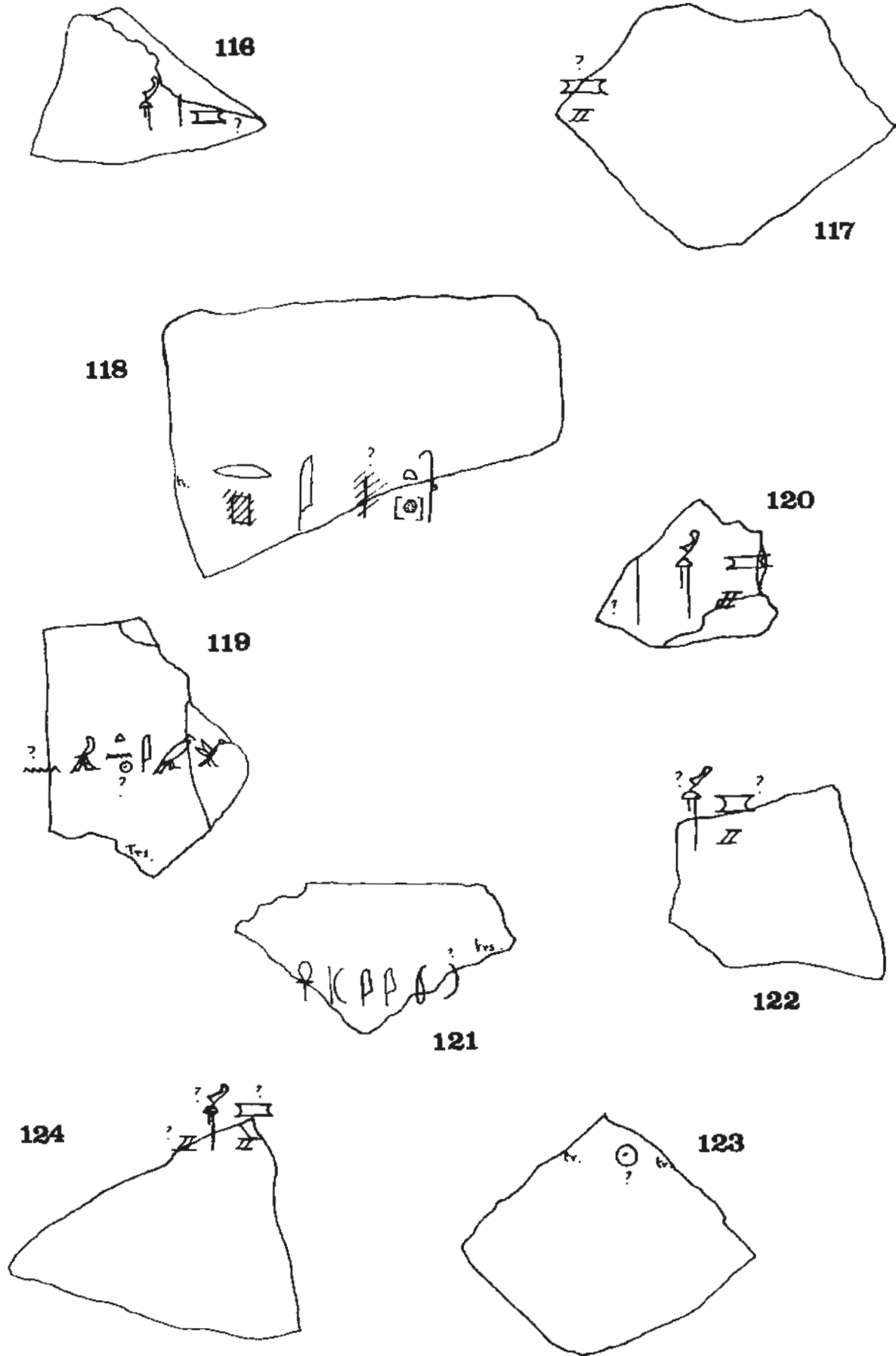


Figure 6.16.

Hieratic labels

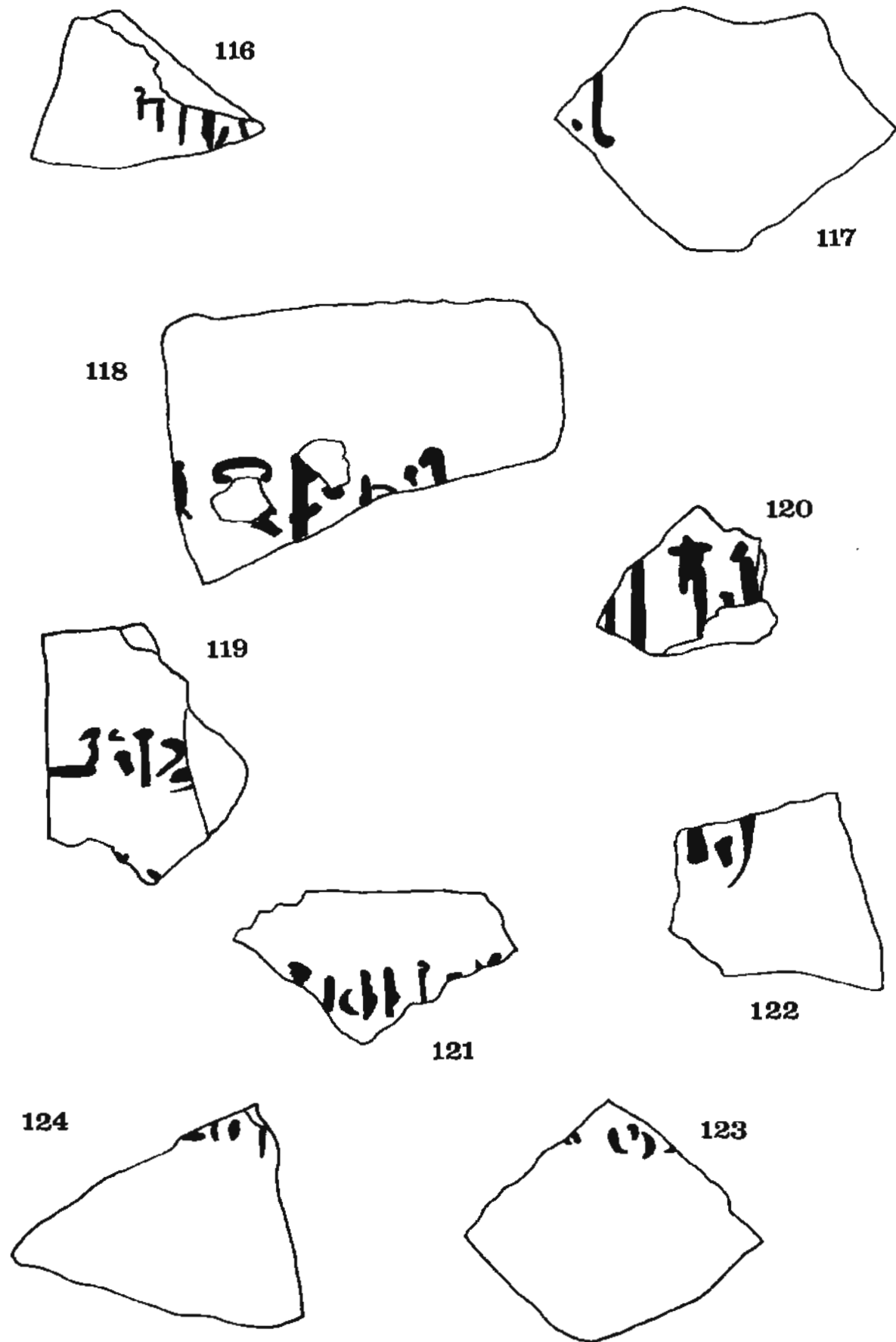


Figure 6.16a.

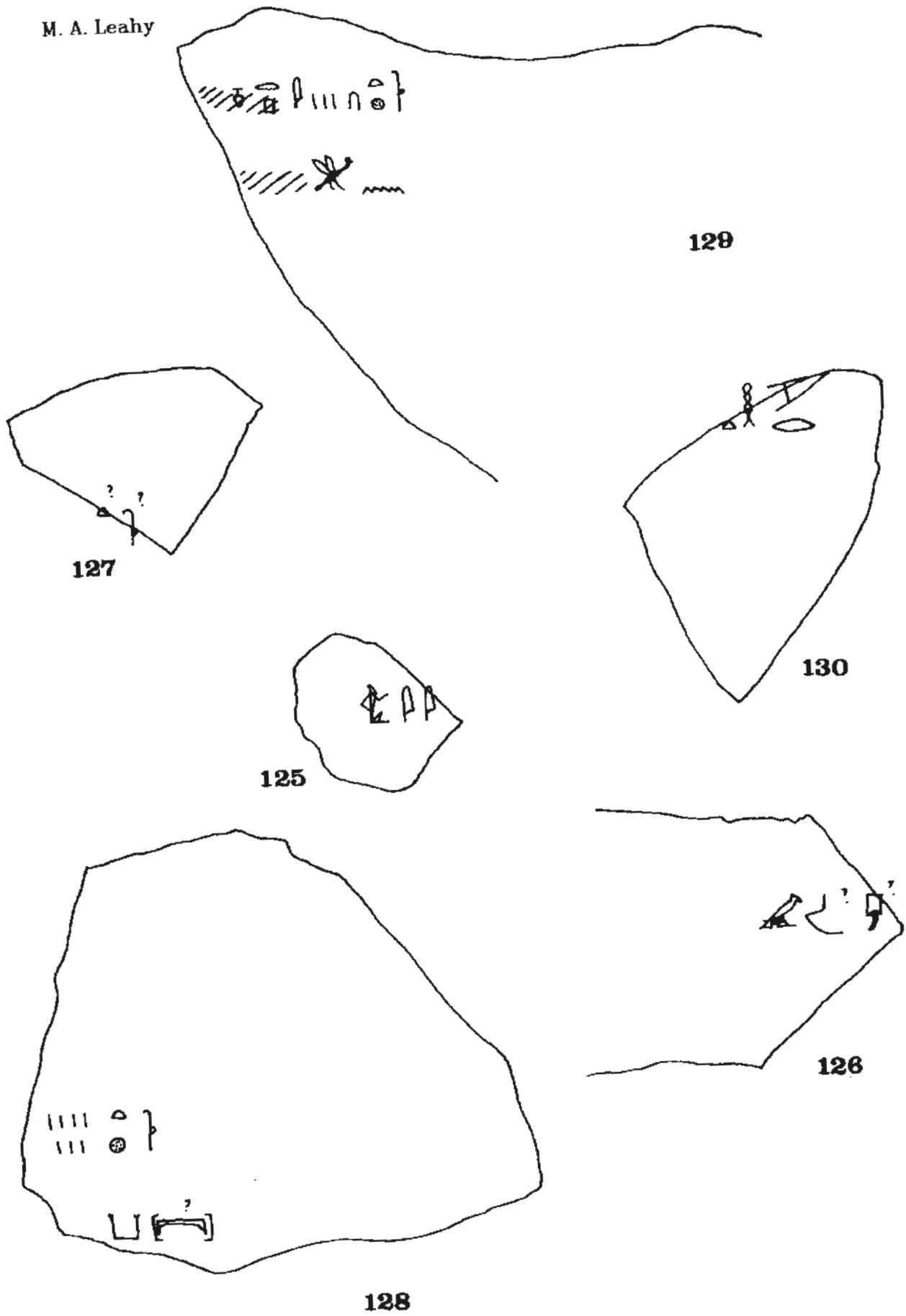
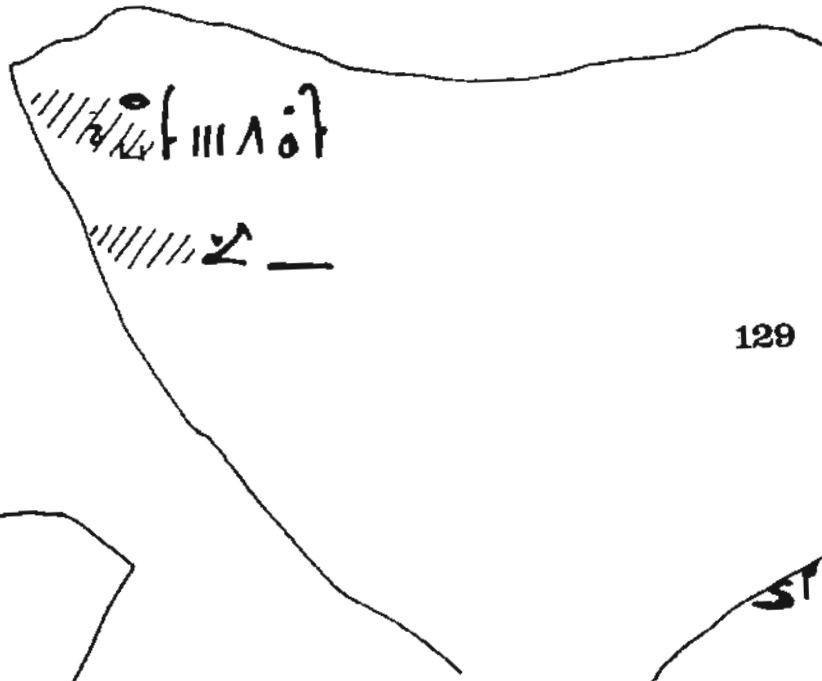


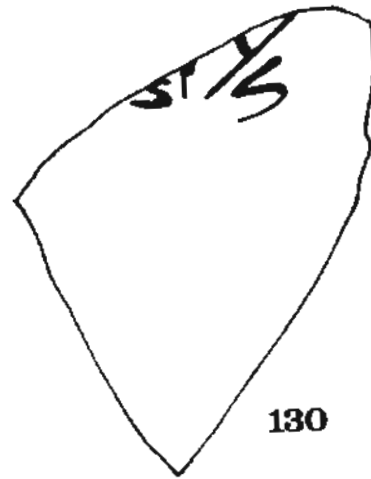
Figure 6.17.



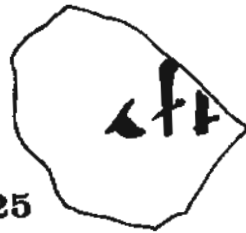
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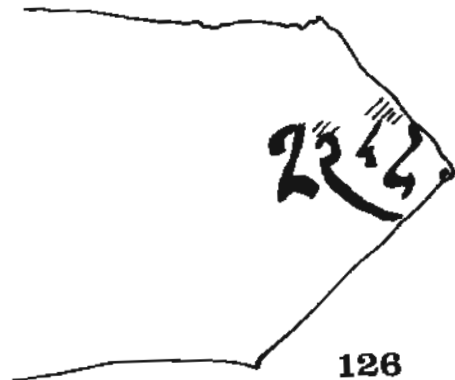
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Figure 6.17a.