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# An early Palaeologan gold hoard 

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[Plates 13-20]
The hoard described below, for which there is no firmer provenance than 'Turkey, probably environs of Istanbul', was concealed probably c. 1305 and thus falls into a period hitherto deficient in recorded hoards. As Metcalf has pointed out, ${ }^{1}$ there are large numbers of finds and hoards of hyperpyra of John III and then a complete lacuna until the hoards, few but large, ${ }^{2}$ deposited in the years $c .1325-55$.

This hoard was made up of at least 188 hyperpyra, comprising 14 of John III Vatzes, 48 of Michael VIII, 40 of Andronicus II, and 86 of Andronicus II and Michael IX. While the hoard may not be complete, for it appeared on the market in groups between March and September 1981, ${ }^{3}$ there is little doubt but that the sample is representative.

During the Palaeologan period, while style can be recognized in its broadest aspects, the dies were often so crudely engraved and the coins so badly struck that it is often not possible to read the sigla clearly even when the coin is 'as struck'. Little attempt is made therefore to discuss style but only to list and illustrate the coins.

## CLASSIFICATION OF THE HYPERPYRA OF MICHAEL VIII

The numeration of the types of hyperpyra of Michael VIII used in the Catalogue is as follows.

Type 1. Obv. Christ seated.
Rev. Emperor and Virgin standing.
This type copies exactly the hyperpyra of John III Vatatzes and Theodore II Ducas Lascaris. It is illustrated in Hendy, ${ }^{4}$ pl. 36, 1. The type was not present in the hoard.

[^0]Var. A shows Michael in a simple panelled loros as in Fig. $1 a$ and, on the obverse, the Virgin seated on a throne with both the bottom and back decorated with diagonal panelling. There is a specimen in the Bibliothèque Nationale.


Fig. 1. The forms of the emperor's loros.
Var. B shows a similar reverse but on the obverse the back of the Virgin's throne bears the letters BB. Specimens of this variety are found in this hoard (no. 15) and in Vienna.

Var. C shows a similar reverse but the emperor wears a loros as in Fig. $1 b$ and on the obverse the back of the Virgin's throne is decorated with the letters KK (reversed). Specimens are to be found in the American Numismatic Society and British Museum while a new example of this variety with the letter $K$ in the reverse field between Michael VIII and the figure of Christ has recently appeared. ${ }^{5}$

Type 3. Obv. The Virgin orans within walls with six groups of towers.
Rev. The emperor, supported by St. Michael, kneels before seated Christ.
Var. A. The emperor is usually dressed as in Fig. 1b. Christ always holds a scroll.
Var. B. The emperor is usually dressed as in Fig. 1c. Christ always holds the Gospels.

## CATALOGUE

All the coins are gold hyperpyra. They are illustrated; with the same numbering as in the Catalogue, on Pls. 13-20. In the right-hand column giving the weights of the coins, wnr signifies 'weight not recorded'.

1-14. JOHN III VATATZES, 1222-54. Magnesia mint.
Obv. $\overline{\mathrm{IC}} \overline{\mathrm{XC}}$. Christ, bearded and nimbate, wearing tunic and colobion, seated upon throne without back; right hand raised in benediction; holds Gospels in left.

Rev. IW $\triangle$ ЄСПОТН ТШ ПОРфVPOГЄNNHTW (abbreviated). Full-length figure of emperor on left, crowned by Virgin nimbate. Emperor wears stemma, divitision, collarpiece, and panelled loros; holds in right hand, labarum on long shaft, and in left, anexikakia. Virgin wears tunic and maphorion.

[^1]

Fig. 2. Sigla used on the coins in the hoard.

## Obverse

1. Fig. 2: 4 above right side of throne
2. Fig. 2: 8 above right side of throne
3. Fig. 2: 16 above right side of throne
4. Fig. 2: 16 above right side of throne
5. $\quad \mathrm{K} \mathrm{O}$ above sides of throne
6. Fig. 2: 11 above left side of throne
$\left\{\begin{array}{l}\text { Fig. 2: } 1 \text { above left side of throne } \\ \text { Fig. 2: } 12 \text { on Gospels }\end{array}\right\}$
7. Fig. 2: 1 above right side of throne
8. Fig. 2:17 above right side of throne
9. Fig 2: 1 above left side of throne
10. $X$ above left side of throne
11. $\quad X$ above left side of throne
12. $X$ above left side of throne
13. Fig. 2: 1 over both sides of throne

Reverse

## No sigla

Weight
No 4.40
No sigla $\quad 4.20$
No sigla $\quad 4.21$
No sigla wnr
Fig. 2: 1 low centre field 4.20
No sigla 4.28
No sigla 4.27
No sigla $\quad 4.16$
No sigla 4.16
No sigla wnr
No sigla $\quad 4.41$
No sigla 4.28
No sigla wnr
No sigla wnr

15-62. MICHAEL VIII, 1258-82. Constantinople mint.

## 15. Type 2B.

Obv. $\bar{M} \bar{\Theta}$ in field, the letter $M$ as in Fig. 2: 23. The Virgin, nimbate, wearing tunic and maphorion, seated upon throne with back; holds nimbate head of Christ on breast. BB on back of throne.

Rev. $\overline{\mathrm{IC}} \overline{\mathrm{XC}} / \mathrm{O}$. On left, emperor kneeling to front, wearing stemma, divitision, collar piece, and panelled loros, placing right hand on chest; supported by St. Michael, winged and nimbate. Christ, on right, seated on throne, wearing tunic and colobion and holding scroll in left hand, crowning emperor with right.

Weight. 4.25 g .

16-37, Type 3A (Christ with scroll).
Obv. Circular walls with 6 groups of towers surrounding bust of the Virgin orans. Various sigla.


As no. 15, but emperor wears jewelled instead of panelled loros.

|  | Obverse | Reverse | Weight |
| :---: | :---: | :---: | :---: |
| 16. | No sigla | Fig. 2: 18 low centre field | 4.10 |
| 17. | Uncertain (no sigla) | Fig. 2: 18 low centre field | 4.22 |
| 18. | Uncertain (no sigla) | Fig. 2: 1 low centre field | 4.15 |
| 19. | No sigla | Fig. 2: 15 top centre field | 4.10 |
| 20. | No sigla | Fig. 2: 12 top centre field | 4.13 |
| 21. | Fig. 2: 6 above walls left and right | Fig. 2: 13 low centre field | 4.18 |
| 22. | Fig. 2: 6 above walls left and right | Fig. 2: 13 low centre field | 4.38 |
| 23. | Fig. 2: 6 above walls left and right | Fig. 2: 13 low centre field | 4.18 |
| 24. | Fig. 2: 5 above walls left and right | Fig. 2: 13 low centre field | 4.15 |
| 25. | Fig. 2: 6 above walls left and right | Fig. 2: 13 ? low centre field | 4.06 |
| 26. | No sigla | Fig. 2: 19 low centre field | 4.14 |
| 27. | No sigla | Fig. 2: 20 low centre field | 4.11 |
| 28. | Fig. 2: 1 above walls left | No sigla | 4.18 |
| 29. | A A within walls | Fig. 2: 2 low centre field | 4.09 |
| 30. | $\Theta \ominus$ within walls | Fig. 2: 3 low centre field | 4.10 |
| 31. | K M (Fig. 2: 23) within walls | Fig. 2: 2 low centre field | 4.21 |
| 32. | K M within walls | No sigla | 4.10 |
| 33. | A K within walls | No sigla | 4.16 |
| 34. | A (Fig. 2: 38) K within walls | No sigla | 4.22 |
| 35. | $\Delta \mathrm{K}$ within walls | No sigla | 4.08 |
| 36. | Fig. 2: 39 with walls to left | No sigla | 4.15 |
| 37. | P M (Fig. 2: 24) within walls | No sigla | 4.12 |

## 38-62 Type 3B (Christ with Gospels).

Obv. as Type IIIA.
Rev. as Type IIIA but Christ holds Gospels instead of scroll.

| 38. | P M (Fig. 2: 23) within walls | No sigla | 4.20 |
| :--- | :--- | :--- | :--- |
| 39. | P M (Fig. 2: 23) within walls | No sigla | 4.12 |
| 40. | P M (Fig. 2: 23) within walls | No sigla | 4.17 |
| 41. | P M (Fig. 2: 23) within walls | No sigla | 4.17 |
| Nos. 40 and 41 share the same reverse die. |  |  |  |
| 42. | [X?] M (Fig. 2: 23) within walls | No sigla | 4.17 |
| 43. | A K (Fig. 2: 29) within walls | No sigla | 4.07 |


|  | Obverse | Reverse | Weight |
| :---: | :---: | :---: | :---: |
| 44. | A K (Fig. 2: 29) within walls | No sigla | nr |
| 45. | $\Pi[\Theta]$ within walls | Fig. 2: 9 in centre field | 4.23 |
|  | The $\epsilon$ is not visible but can be confirmed by a coin struck from the same die in the author's collection. |  |  |
| 46. | $\Pi \in$ within walls | Fig. 2: 9 in centre field | 4.14 |
| 47. | [IT] € within walls | Fig. 2: 9 in centre field | 4.14 |
| 48. | $\epsilon \Pi$ within walls | Fig. 2: 9 in centre field | 4.12 |
| 49. | $\Pi €$ within walls | Fig. 2: 10 in centre field | 4.12 |
| 50. | $\Pi \in$ within walls | Fig. 2: 10 in centre field | 4.14 |
| 51. | $\Pi \in$ within walls | Fig. 2: 10 in centre field | 4.08 |
| Nos. 50 and 51 share the same reverse die. |  |  |  |
| 52. | $[\Phi] \Pi$ within walls | $\Theta$ low centre field | 4.12 |
| 53. | $\Pi$ ¢ within walls | No sigla | 4.10 |
| 54. | B K (Fig. 2: 29) above walls | No sigla | 4.11 |
| $\Pi$ ¢ within walls |  |  |  |
| 55. | $\Theta \Theta$ within walls | No sigla | 4.03 |
| 56. | $\Theta \Theta$ within walls | No sigla | 4.13 |
| 57. | $\Theta \Theta$ within walls | No sigla | 4.09 |
| 58. | C $\Delta$ within walls | No sigla | 4.10 |
| 59. | C $\Delta$ within walls | No sigla | 4.09 |
| 60. | $\mathrm{X} \Pi$ within walls | No sigla | 4.13 |
| 61. | Uncertain, possibly M left, within walls | No sigla | 4.08 |
| 62. | Uncertain | No sigla | 4.14 |

63-102. ANDRONICUS II, 1282-95. Constantinople mint.
63-70. Emperor without nimbus.
Obv. Circular walls with six groups of towers surrounding bust of Virgin orans. Various sigla.

Rev. Various legends. Emperor, without nimbus, wearing stemma, divitision, collar piece and loros, kneeling in proskynesis before a figure of Christ, wearing tunic and colobion standing facing and blessing emperor.

Note. For the hyperpyra of Andronicus II the reverse legends are given in full. They vary to such a degree that it may be that each die varies sufficiently for the complete rendering of the legend to assist in die identification.

|  |  | Weight |
| :---: | :---: | :---: |
| 63. | Obv. X B within walls | 4.07 |
|  | Rev. AN/ $\left.\triangle \mathrm{PONI} / K O C \Delta \in C / \Pi \mathrm{TH} \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}\right\}$ retrograde; no sigla |  |
| 64. | Obv. B X above walls |  |
|  | Fig. 2: 8 within walls, left and right | 4.17 |
|  | Rev. AN $\triangle \mathrm{P} / \mathrm{ONIKOC/} \mathrm{\triangle ЄПC/OП} \mathrm{\Lambda} \mathrm{\epsilon} \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla |  |

65. Obv. B X above walls 4.16

Fig. 2: 8 within walls, left and right
Rev. $+/ \mathrm{AN} \Delta \mathrm{PO} / \mathrm{NIKOC} / \Delta \in С П О /$ TICOП $/ \wedge \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}$; no sigla
66. Obv. Fig. 2: 8 above walls left and right

Fig. 2: 8 within walls left and right
Rev. ANA/PONIKO/С $\triangle$ ЄСПО/TICOПA $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
67. Obv. A M within walls

Rev. AN $\Delta \mathrm{PO} / \mathrm{NIKOC} / \overline{\mathrm{XW}} \Delta \in C \Pi / \mathrm{IL} * \mathrm{IIIX} \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}$; no sigla * This letter reversed.
68. Obv. II within walls 4.13

Rev. $+/ \mathrm{AN} \Delta \mathrm{P} / \mathrm{INIKOC} / \Delta \in С П \mathrm{OT} \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}} ;{ }_{\Gamma} \text { low right }}$
69. $O b v$. Fig. 2: 26 within walls 4.06

Rev. AN/ $\triangle$ PON/IКОС $\Delta / Є С П О Т / Н С О П \Lambda ~ \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}} ; ~}{ }_{\Gamma}^{\mathrm{M}}$ low right
70. Obv. Fig. 2: 26 within walls

Rev. [ ]/NIKO $\not / / \Delta Є C П I I \Gamma / C П \wedge \wedge V /$ Fig. $2: 4 \frac{\overline{\mathrm{IC}}}{\mathrm{XC}} ; \mathrm{M}^{\mathrm{M}}$ low right

71-102. Nimbate emperor.
$O b v$. as 63-70.
Rev. as $63-70$ but emperor nimbate.
71. Obv. $\mathrm{P}[\mathrm{P}$ ? ] within walls

Rev. $+/ \mathrm{AN} \Delta / \mathrm{PINIKI} / \mathrm{C} \Delta \in С П / \mathrm{THC} / \mathrm{O} П \mathrm{AC} / \wedge \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
72. $O b v$. P P within walls

Rev. +/AN $\Delta \mathrm{O} / \mathrm{NIKOC} / \in N X W \Delta / \Pi I \mathrm{~V} \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}$; no sigla
73. Obv. B B within walls

Rev. $[+] / A N \Delta P / O N I K O C / \overline{X U} \Pi I / \not / \Pi I / C B / N € \frac{\overline{\mathrm{IC}}}{\overline{X C}}$; B low centre


## Weight

75. Obv. Fig. 2: 7 and 8 within walls left and right 4.04

Rev. +/AN $\Delta /$ PNIKIC/ЄNXU/ $\Delta \in \Pi / \mathrm{OTI} / \mathrm{S} \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
The obverse of this coin appears to be a mule of a left-hand die ${ }^{6}$ of a coin with the sigla Fig. 2: 7 on both sides within the walls (Kunst and Münzen Auction, Cat. 6, 5-7 May 1966, lot 120) and a right-hand die with sigla Fig. 2: 8 both left and right within the walls (BMC 17). This possibly indicates that these sigla were consecutive issues.
76. $O b v$. A $\mathbb{A}$ within walls; : above walls left

77. Obv. [A] A within walls

Rev. ANA/PONIK/OCENXW/DЄСПОТI/СОПА/^AIO/^ОГО/С $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
78. Obv. A within walls right

Rev. [+]/AND/PONIKO/CENXW $\Delta / Є С П О[T I C] / O П A /$
АAIO/^OГ/OC $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
79. Obv. Fig. 2: 35 and 34 within walls left and right,

Fig. 2: 21 above walls left and right*


* low centre, ${ }_{C}^{M}$ low right
* Traces of the fleur-de-lis to the right are the result of the strike of the left-hand die. There is no fleur-de-lis on the right-hand die.

80. Obv. Fig. 2: 36 and 34 within walls left and right 4.12

Rev. +/ANAPO/NIKOCE/NXU[T]/OПCTOO/OAHAЄ/CVKOO/PC $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}} ;$
$[*]$ low centre, $\left[\begin{array}{c}M \\ C\end{array}\right]$ low right
81. Obv. Fig. 2: 33 and 28 within walls left and right, uncertain sigla above
Rev. +/ANAPO/NIKOCE/NXWT/OПCTOO/OAHAЄ/[C]VKOO/PC $\frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}$;
[*] low centre, $\left[\begin{array}{l}M \\ C\end{array}\right]$ low right

[^2]Note. Nos. 79 and 80 share the same right-hand obverse die and Nos. 79, 80 , and 81 all share the same reverse die. It is difficult to be certain but it seems likely that the reverse die is more worn on no. 81 than on 79 and 80.
82. $O b v$.「 M (Fig. 2: 23) within walls,
$\Gamma(?)$ (Fig. 2: 23) (?) above walls
Rev. +/AN $\Delta \mathrm{PO} / \mathrm{NIKOC} \mathrm{\in /I} \mathrm{\bar{W}} \mathrm{\Delta} \mathrm{\in СП/ОТНС/ПА} \mathrm{\wedge} \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
83. $\quad \Gamma \mathrm{M}$ (Fig. 2: 23) within walls, $\Gamma($ ? ) $M$ (Fig. 2: 23) above walls

84. Obv. [Г]? M (Fig. 2: 23) within walls

Rev. +/АИ $\Delta \mathrm{P} / И І К О С І / Є И \overline{X W} \Delta / С Т Н С / О П А \wedge / І \wedge О / Г S ~ \frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}}$; no sigla
85. $O b v$. Fig. 2: 41 and $M$ (Fig. 2: 23) within walls left and right

Rev. $+/ \mathrm{A} \Delta$ РОИ/KIIЄN/XШ $\Delta \in С / П О Т / Н С ~ \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
86. Obv. Fig. 2: 41 and $M$ within walls left and right

87. Obv. Fig. 2: 41 and $M$ within walls left and right

Rev. $+/ А И \Delta I P O / \mathrm{NIKOCЄ} / \overline{\mathrm{XW}} \Delta Є С / П О Т А С / О П А А / Г \mathrm{~S} \frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla
88. Obv. Fig. 2: 40 and 41 within walls, $Г \Gamma$ above walls
wnr

89. Obv. Г and Fig. 2: 42 within walls left and right,
$B$ above walls left
Rev. +/AN $\Delta \mathrm{PO} / \mathrm{NIKOC} \mathrm{\in N} / \mathrm{WO} \Delta \Theta / С \cap \mathrm{OTH} / \geqslant \frac{\overline{\mathrm{IC}}}{\mathrm{XC}} / \Lambda / \Lambda / \mathrm{K} / \Gamma$; no sigla
90. Obv. C N within walls, $\cdot$ above walls left

Rev. $+/ \mathrm{AN} \triangle \mathrm{PON} / 彡 / \in N K O B C / \Gamma X W I € / П \wedge O \in I / \Delta \in \Pi T H$
Fig. 2: 8 low centre
91. $O b v$. C N within walls, Fig. 2: 5 above walls left

Rev. $+/ \mathrm{AN} \Delta \mathrm{PO} / \mathrm{NIKOC} / \mathrm{X} Ш I \Theta / \Pi \wedge \mathrm{O} \mathrm{I} / \Delta \mathrm{O} \Pi \overparen{\mathrm{TH}} / \mathrm{S} \frac{\overline{\mathrm{IC}}}{\mathrm{XC}} / \Gamma \mathrm{I} / \mathrm{I} ;$
Fig. 2: 8 low centre
92. Obv. C NC within walls, Fig. 2: 5 above walls left
4.10

Coins 91 and 92 were struck from the same reverse die and the development of the die flaws show clearly that 92 was struck after 91.
93. Obv. CN NC within walls, Fig. 2: 8 above walls left

94. Obv. CN NC within walls, Fig. 2: 8 and [?] above walls left and right

95. Obv. CN NC within walls, Fig. 2: 8 and C above walls left and right

Rev. AN $\Delta[\mathrm{PO}] / \mathrm{NIKOC}[\epsilon] / \mathrm{NXWTC}$ V/ӨПОСТ/ПВАО/ГIOC
$\frac{\overline{\mathrm{IC}}}{\overline{\mathrm{XC}}} / \Pi \Lambda / \mathrm{OP} / \Delta \Lambda / \Gamma \mathrm{C} ; \mathrm{NC}$ and Fig. 2: 8 low centre
96. Obv. CN C within walls

B behind emperor's head, $\underset{N}{\mathrm{~N}}$ low right, Fig. 2: 8 low centre
97. $O b v$. CN N within walls, Fig. 2: 5 above walls left

Rev. [+]/ANAP/ONIKO/[C]ЄНXW/TOӨOI/ПICTO/B $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$;
$\mathrm{B}[\cdot] / \mathrm{E}[\cdot] / \mathrm{C}[\cdot]$ low right, Fig. 2: 8 ? low centre
98. Obv. CN NC within walls $\quad 4.07$

Rev. +/ANAP/ONKOC/ПАТСТО گ/BTHC $\frac{\overline{\mathrm{IC}}}{\mathrm{XC}}$; no sigla?
99. Obv. $* M$ ? within walls, $\Gamma$ above walls left 4.01

100. Obv. CN NC within walls, $\quad 4.07$

Fig. 2: 5 and Fig. 2: 5 above walls left and right

$\mathbf{N}_{\mathbf{N}}^{\mathrm{C}}$ low right, Fig. 2: 5 or 8 low centre
101. Obv. possibly A M (Fig. 2: 23) within walls

Rev. AN $\Lambda / \mathrm{CNIKOG} /[\mathrm{E}] \dot{\mathrm{N}} \overline{\mathrm{U}} \wedge \mathrm{L} / 彡 / \mathrm{IC} I \mathrm{IO} / \Gamma^{*}{ }^{*} /-\frac{\overline{\mathrm{C}}}{\overline{\mathrm{XC}}}$; no sigla?

* This letter reversed.

102. Obv. П P ? within walls

Rev. $+/ \mathrm{AN} \Delta / \mathrm{PON} \mathscr{/} \mathrm{C} / \Lambda \in C \Pi \not / / T \mathrm{H} / \mathrm{I}\left[\frac{\overline{\mathrm{IC}}}{\overline{X C}}\right]$; no sigla

103-88. ANDRONICUS II AND MICHAEL IX, 1295-1320
Constantinople mint, nos. 103-78 (but see the Commentary below); Thessalonica mint, ${ }^{7}$ nos. 179-84; uncertain, nos. 185-8.

Standard type, all with six groups of towers on the obverse; legends always columnar unless otherwise stated.

|  | Obverse | Reverse | Weight |
| :---: | :---: | :---: | :---: |
| 103-16. | Fig. 2: 32 within walls | No sigla | $\begin{aligned} & \text { 4.14(2), 4.13(2), 4.11, } \\ & 4.10(3), 4.06,4.01 \text {, } \\ & 3.99,3.97,3.81 \text {, wnr } \end{aligned}$ |
| 117-20. | M X within walls | B $\Gamma$ in outer fields at $90^{\circ}$ and $270^{\circ}$; Emperors and legends transposed | 4.08, 4.07, 4.03, wnr |
| 121-33. | I I or Fig. 2: 26 within walls | No sigla | $\begin{aligned} & \text { 4.11(2), 4.09, 4.06, } \\ & 4.05,4.03(2), 4.02, \\ & 4.00,3.99,3.95 \\ & 3.94,3.75 \end{aligned}$ |
| 134-7. | K И or $\mathrm{K} И \mathrm{U}$ within walls | No sigla | 4.08, 4.03, 4.01, 3.88 |
| 138-9. | Fig. 2: 5 or 6 above walls, left or right $\mathrm{K} U$ within walls at $90^{\circ}$ and $270^{\circ}$ | No sigla | 4.04, 4.01 |
| 140-1. | Fig. 2: 5 above walls left K N within walls | No sigla | 4.02, 3.99 |
| $142 .$ | Fig. 2: 12 above walls left and right K N within walls | No sigla | 4.00 |
| $143 .$ | $\mathrm{K}(\mathrm{N}$ ?) above walls Fig. 2: 5 within walls left and right | No sigla | 3.99 |
| 144-5. | $\Gamma \wedge$ within walls | No sigla | 4.06, 4.01 |


|  | Obverse | Reverse | Weight |
| :---: | :---: | :---: | :---: |
| 146. | Fig. 2: 1 above walls left and right; $\Gamma \in$ within walls | No sigla | 3.91 |
| 147. | P Г(?) or possibly В Г(?) above walls | No sigla | 3.93 |
| 148. | $M$ (Fig. 2: 23) $\Gamma$ within walls | No sigla, emperor and legends transposed | 4.02 |
| 149-50. | $M$ above walls, left M (Fig. 2: 23) $\Gamma$ within walls | No sigla, emperor and legends transposed | 4.02, 3.99 |
|  | Nos. 148,149 , and 150 all share the same reverse die and nos. 149 and 150 the same left obverse die. Progression of die flaws shows that 148 was struck before 149/150. |  |  |
| 151. | П И(?) above walls $\Pi$ K(?) within walls | No sigla | wnr |
| 152-4. | Fig. 2: 15 outside walls at 90 and $270^{\circ}$ | No sigla, figures and legends transposed | 4.00, 3.99, 3.97 |
| 155. | ? Fig. 31 within walls | No sigla, figures and legends transposed | 4.00 |
|  | All nos. 152-5 share the left obverse die. There is lower right obverse field of these two varieties was of the four coins is rathe | same reverse die and nos a possiblity that no. 154 within the walls. It is no s struck first. It should different from the other | 152- 3 share the same also has a star in the possible to say which be noted that the style hyperpyra of this reign. |
| 156. | B $\Gamma$ within walls Possibly as $166 / 7$ | No sigla | wnr |
| 157. | ^ K (?) within walls | No sigla | wnr |
| 158-61. | C $\Delta$ within walls | No sigla | 4.09, 4.06(2), 3.95 |
| 162. | Fig. 2: 22 within walls | No sigla | 4.03 |
| 163. | B B within walls | No sigla | 4.09 |
| 164. | Fig. 2: 5 above walls left $\Pi \mathrm{K}$ within walls | No sigla | 4.00 |
| 165. | A right within walls | No sigla | wnr |
| 166-7. | B T within walls | No sigla; no 167 has emperors and legends transposed | 4.02, 4.01 |
| 168. | $\Pi \Phi$ within walls | No sigla | wnr |
| 169-70. | $\Pi \mathrm{P}$ within walls (? possibly Г P) | No sigla | 3.99; wnr |
| 171-3. | C C above walls <br> $\Pi \mathrm{P}$ within walls | No sigla; nos. 171 and 172 have emperors and legends transposed | 4.01, 3.97, wnr |
| 174. | C C above walls $\Pi \mathrm{P}$ within walls | C C between the three figures | 4.07 |
| 175. | Fig. 2: 5 above walls, right and left ? within walls | No sigla, emperors and legends transposed | wnr |


|  | Obverse | Reverse | Weight |
| :---: | :---: | :---: | :---: |
| 176. | Fig. 2: 8 within walls left and right | No sigla | 4.10 |
| 177. | Fig. 2: 37 and $X_{B}^{X}$ outside walls at 270 and $90^{\circ}$ | No sigla | 4.06 |
| 178. | $\begin{aligned} & \text { B } \text { outside } \end{aligned}$ | No sigla | 4.16 |

Nos. 177 and 178 share the same reverse die and the progression of the die flaws indicate that 177 was struck before 178. They also share the reverse die with a coin in the BN Paris with sigla $\begin{aligned} & \mathrm{P} \\ & \mathrm{N} \\ & \mathbf{X} \\ & \mathbf{B}\end{aligned}$.
179. Fig. 2: 30 outside walls at .. in field between three 4.00 $270^{\circ}$ and $90^{\circ} \quad$ figures; circular legend
180. K K outside walls at 270 No sigla; circular 3.98 and $90^{\circ} \quad$ legend
181-3. No sigla No sigla; circular 4.07, 4.02, wnr
184. No sigla No sigla; columnar 4.09
legend
Nos. 179-84 are all products of the mint of Thessalonica.
185-8. Uncertain sigla No sigla; vertical wnr
legends

## COMMENTARY

JOHN III
These coins call for little comment beyond the fact that they were still in circulation fifty to sixty years after issue. ${ }^{8}$ All the coins were, as might be expected, the late issues with sigla, in poor style.

## MICHAEL VIII

The hoard shows clearly what appeared likely from casual examination of catalogues and collections, namely that hyperpyra depicting Christ holding scroll and Christ holding Gospels were struck in approximately equal numbers and that the change from one to the other presumably occurred about half-way through the issue of this general type, i.e. $c .1272 / 3$.

The meaning behind the change is unknown. Presumably it was not made without a reason. Possibly it indicated a change in the purity of the

[^3]gold. Certainly the Palaeologan hyperpyra badly need a programme of analysis.

The broad outlines of Michael's gold coinage at Constantinople are obvious. The earliest issues are those with the emperor kneeling before Christ, wearing a panelled loros, as John III and Theodore II were depicted on their hyperpyra. This reverse occurs with two varieties of obverse, the earliest showing the Virgin seated upon a throne whose back is decorated with diagonal panelling, while a variety, presumably slightly later, has the letters B B on the back of the throne. These two varieties were followed by another where Michael wears the jewelled loros, and on the obverse, the Virgin seated upon a throne with the letters K K (reversed) upon the back. These sigla are the same as those on one of the earliest Constantinople copper types.

A new discovery ${ }^{9}$ of this last type with the letter $K$ between Michael and Christ links this group with the earliest varieties of the common type of hyperpyra with the obverse of the Virgin orans within the walls of Constantinople. The earliest issues of this type show the walls not as an oval circuit but with a sharp apex at the bottom, appearing somewhat like a Norman kite-shaped shield. It was not possible to place sigla within the walls of this shape and on the earliest issues they appear only in the field on the reverse (no. 19). When sigla did appear on the obverses they were at first placed above the walls (nos. 21-5 and 28). Often these coins were struck on broad flans with quite a shallow concavity. As the reign continued the diameter of the flans shrank slightly and the concavity became rather more pronounced.

With the shrinkage of the flan, the design became more crowded on the reverse and possibly as a result of this the outline of the walls on the obverse became more oval in shape in order to accommodate sigla within the walls (nos. 35 and 37).
As has been suggested, there was a change of design in the early 1270 s when Christ exchanged his scroll for the Gospels. In this form the hyperpyron remained unchanged for the remainder of the reign. With the sigla firmly fixed upon the obverse, they disappear from the reverse of the later coins and with the exception of one group (nos. 45 to 51) it is most unusual to find them on the reverse of coins where Christ holds the Gospels.

Throughout these chronological changes it is possible to follow the stylistic development of Michael's portrait from Nicaean form with hollow cheeks and forked beard (nos. 19 and 23) to the more traditional Palaeologan type with full features (nos. 58 and 60 ).

## ANDRONICUS II

This hoard gives further confirmation, if it were needed, that all coins depicting Andronicus kneeling before Christ belong to his first sole reign
${ }^{9}$ See note 5 .
and that none can belong to his second reign. ${ }^{10}$ At a point possibly about one-third to half-way through the joint reign of Andronicus II and Michael IX the number of groups of towers surrounding the Virgin was reduced from six to four. Even if one allowed that Andronicus II's second-reign hyperpyra reverted to six groups of towers, the fact that the hoard contains no hyperpyra of Andronicus II and Michael IX with four groups of towers is evidence enough. If any of the coins of Andronicus II in this hoard belonged to Andronicus II's second reign, then approximately fifty of the coins of Andronicus II and Michael IX should be of the variety with four groups of towers. In fact it seems certain that the coins of Andronicus II's second sole reign in all metals continued to carry the portraits of Andronicus and Michael as a type immobilisé.

Although the coins depicting Andronicus II without a nimbus are listed first there is no firm evidence that there is any chronological distinction between them and those where the emperor is nimbate. In fact there is little stylistic difference in the figures on the two classes of coin although on the non-nimbate coins the legends are shorter with larger more monumental letters with well-defined serifs. The copper trachea of the same type as the hyperpyra were struck in two varieties-the one without sigla, which might be considered earlier, shows the emperor with nimbus, which the other type with sigla A M lacks the nimbus. The comparable hyperpyra with the same sigla $A$ M are nimbate, so that the exact significance of the nimbus is uncertain.

## ANDRONICUS II AND MICHAEL IX

The importance of the hoard, as far as this reign is concerned, is that all the coins are of the early type with six groups of three towers (eighteen towers) surrounding the Virgin. Prior to this hoard the author had records of 73 sets of sigla for the hyperpyra with four groups of three towers (twelve towers) and only 38 sets of sigla for the eighteen-tower coinage. For this reign the hoard produced 18 sets of sigla previously unknown to the author so that now there are records of 56 sets of sigla for the eighteen-tower coinage and 73 sets for the twelve-tower coins. Of the 56 sets of sigla for the eighteen-tower coins 32 are present in the hoard. It seems probable that some of the 24 eighteen-tower varieties that are absent are only missing because of their rarity and because the hoard was probably deposited approximately two-thirds to three-quarters of the way through the period of issue of the eighteen-tower coinage, unless of course certain of the varieties were produced by mints other than Constantinople and Thessalonica. Various coins in the hoard differ so widely in style that the author does not rule this out entirely.

[^4]THE MINTING OF GOLD AT THESSALONICA AND POSSIBLY ELSEWHERE
The attribution to Thessalonica for a group of coins which includes nos. 179-84 has been published elsewhere. ${ }^{11}$ Other coins present in the hoard for which alternative mints might be proposed are nos. 152-5 and 177-8.

Nos. 152-5 are so crude that at first the writer thought that they might be contemporary copies, but it seemed unlikely on statistical grounds that the hoard would contain four forgeries all struck from the same reverse die. A further point in their favour is the fact that they were struck with two obverse dies-nos. 152 and 153 share the same left-hand obverse die only. It would seem unlikely that a forger would copy exactly the rather complicated official method of striking, when striking from a single obverse die would hardly have produced a worse result.

Nos. 177-8 show many affinities to the Thessalonican coins; the style of the portraiture, the slim elongated figure of Christ, the angular form of Christ's arms, the curving form of the drapery over the emperor's arms, and the fact that on the obverse the sigla are outside the walls. On the other hand, the legends are in columnar form and the lettering is not quite Thessalonican. Over all, however, the style owes more to the issues of Thessalonica than Constantinople.

There is some evidence that the precious-metal mint moved with the emperor on his travels, ${ }^{12}$ and under the circumstances hyperpyra indistinguishable from the metropolitan coins could have been struck in the provinces by Constantinopolitan workmen accompanying the emperor. It might be mentioned in this context, for example, that prior to this hoard the only specimens of nos. 171-4 known to the author were three pieces, in a private Greek collection, all acquired in Thessalonica. It should of course be mentioned that it is one thing to suggest that certain coins were struck at provincial mints and quite another to identify those mints.

## SOME COMMENTS ON THE NUMBERS OF SIGLA

The number of sigla so far recorded by the writer, 129 , may come as a surprise but there is no certainty that this total will not increase, given the fact that 18 of the 32 sigla of this reign in the hoard were previously unrecorded. The large Istanbul hoard of 1959/60 allegedly contained more than 10,000 hyperpyra, mostly of Andronicus II and Michael IX, although ending with some hundreds of Andronicus II and III. A large proportion of these coins were of the twelve-tower variety and although some 25 kilograms or more of the hoard were melted, possibly as many as 4,000

[^5]coins went into trade or museums. The sheer quantity of this material might indicate that the majority of sigla are known for the twelve-tower variety of hyperpyra.

Against unrecorded sigla, however, must be set the mules-that is, coins struck by a left- and right-hand obverse die which were not officially meant to be paired together, thus producing an 'unofficial' set of sigla. No. 75 is almost certainly a contender for this category of coin. Other mules, where combinations of letters are used such as on nos. 90-8 will undoubtedly be harder to spot. However, it may not be far wrong to suggest that the number of undiscovered mules which should be removed from the recorded 129 sets of sigla might be approximately equal to the number of sigla that are still to be discovered. If this is so, then about 130 sets of sigla were used during the joint reign. It seems certain that the coins depicting Andronicus II and Michael IX continued to be struck as a type immobilisé for Andronicus II's second sole reign. Thus the sigla must be spread over approximately a thirty-year period, 1295 to 1325 . The simple alternatives indicate a change of sigla about every three months if all are to be assigned to Constantinople. If there was a less frequent change of sigla, perhaps only three times a year for example, then mints other than Constantinople and Thessalonica must be involved.

Little is known of the organization of the mint at this period, but presumably there was an official whose task it was to devise the series of sigla. There is a wide range of both symbols and letters, some used but once without variation and others where certain groups of letters are used in up to twenty combinations. It seems unlikely that the sigla are based on the initials of mint officials' names, as they were in the west at this time, nor is it likely that each group of combinations of similar symbols or letters represent the tenure of office of one official, for there is no reason to think that a new official might not merely continue to vary a siglum introduced by his predecessor.

Certain sigla recur from time to time during successive reigns, and although this may be coincidence, other alternatives should not be ignored. For example, Fig. 2: 26 or I I appears both on the coins of Andronicus II and on those of Andronicus II with Michael IX and, if the coins of Andronicus II depicting the emperor without nimbus are early in the reign, then this siglum occurs very early in both reigns. Perhaps, therefore, some sets of sigla are not necessarily just indications of a cycle of issues but may possibly be the indication of either the source of the bullion or the destination of the hyperpyra bearing that particular mark.

## METROLOGY

As Pegolotti speaks about payments being made by weight rather than by tale, and as the hyperpyra in the published Bulgarian hoards are very variable
in weight, ranging, for example, from $2 \frac{1}{2}$ to $4 \frac{3}{4} \mathrm{~g}$ or more, ${ }^{13}$ it is interesting to see that the coins in this hoard are very carefully weight-adjusted.

They show a clear decline in average weight reign by reign:

|  | No. of weights | Mean | Median |
| :--- | :--- | :--- | :--- |
| John III | 10 | $4.26^{14}$ | $4.21 / 4.27$ |
| Michael VIII | 47 | 4.14 | 4.13 |
| Andronicus II | 39 | 4.08 | 4.08 |
| Andronicus II with Michael IX | 71 | 4.03 | 4.02 |

The histograms for Michael VIII and for Andronicus II reveal no sign of the culling of heavy coins. That for Andronicus II with Michael IX exhibits positive skewness, suggesting that it combines coins on different weightstandards. Nos. 103-16 in the catalogue are the only group that are clearly above average weight for the joint reign.

## FUTURE RESEARCH

Earlier studies of the coins of Michael VIII and Andronicus II have not been based on hoard material. Examination of this important hoard shows that, despite the coins' unprepossessing appearance, a die-study is quite feasible. This hoard and the Istanbul hoard of 1959/60 place the issues in perspective for the periods $c .1305 / 10$ and $c .1330$. Metallurgical analysis also should shed light on the problems of this coinage. Such studies are overdue and it is to be hoped that this publication will spur work on in these fields.

13 Metcalf, Coinage in South-eastern Europe, pp. 278-9.
${ }^{14}$ Cf. the mean weights, varying from 4.27 to 3.92 , in D. M. Metcalf, 'The Agrinion hoard. Gold hyperpyra of John III Vatatzes', $N C^{7} 20$ (1980), 113-31, at p. 131.

PLATE 13


BENDALL, PALAEOLOGAN GOLD (1)


BENDALL, PALAEOLOGAN GOLD (2)

PLATE 15


BENDALL, PALAEOLOGAN GOLD (3)

PLATE 16


BENDALL, PALAEOLOGAN GOLD (4)


PLATE 18


BENDALL, PALAEOLOGAN GOLD (6)

PLATE 19


BENDALL, PALAEOLOGAN GOLD (7)

PLATE 20


BENDALL, PALAEOLOGAN GOLD (8)


[^0]:    Type 2. Obv. Virgin seated.
    Rev. Emperor, supported by St. Michael, kneels before seated Christ, who holds scroll.
    ${ }^{1}$ D. M. Metcalf, Coinage in South Eastern Europe, 820-1396, 1979, pp. 130-2.
    ${ }^{2}$ For the Istanbul hoard of 1959/60, see NCirc. 82 (1974), 285.
    ${ }^{3}$ In March 1981, 78 coins and a further 90 coins in September 1981 were brought to London by the same source, while 21 coins were seen in June 1981 in the hands of two other sources. Previously unrecorded varieties and die-links between all groups confirm that all are from one hoard.
    ${ }^{4}$ M. F. Hendy, Coinage and Money in the Byzantine Empire, 1081-1261, Washington, 1969.

[^1]:    ${ }^{5}$ Münzen und Medaillen AG, Basel, Switzerland, list 434, June 1981, no. 26.

[^2]:    ${ }^{6}$ S. Bendall and D. Sellwood, 'The method of striking scyphate coins using two obverse dies in the light of an early thirteenth century hoard', $N C^{7} 18$ (1978), 93-115.

[^3]:    ${ }^{8}$ A description of John's coins is retained in Pegolotti's manual of the early fourteenth century, La Practica della Mercatura, but Grierson has shown that the greater part of his list was compiled $c .1290$ (or even nearer 1280). See P. Grierson, 'The coin list of Pegolotti', in Studi in onore di Armando Sapori, pp. 485-92.

[^4]:    ${ }^{10}$ A. Veglery and A. Millas, 'Gold Coins for Andronicus III', NCirc. 82 (1974), 4-7, 50-1; P. Protonotarios, 'Is a reattribution of the hyperpyron of the "Proskynesis" type justified?', ibid., 283-5.

[^5]:    ${ }^{1}$ See note 7.
    12 S. Bendall, 'A Thessalonican Hyperpyron of Andronicus II and Michael IX?' NCirc. 89 (1981), 158.

