CELTIC COINS FROM THE ROMANO-BRITISH TEMPLE AT HARLOW

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PART III (Plates VI-VII)

1. The excavations at the site of the Romano-British temple at Harlow were completed in 1968. During 1967 and 1968 together, I silver and 87 bronze coins were found, making the total from the site 206. Having started on the plan of illustrating all the coins, I carry it through to completion in Plates VI and VII.

In my last account of the finds from this important site¹ I analysed percentages of the rulers, mints and types represented. The twelve coins found in 1968, which were not included in these totals, do not materially alter the ratios, and I will not, therefore, repeat the arithmetic. (For accuracy's sake I should record two minor reattributions, after cleaning, of coins in my summary lists; the coins are now correctly recorded in the lists appended here. One Tasciovanus I called Mack 174 has been shown to be Mack 175 and one Cunobelinus I called Mack 249 has been shown to be Mack 248. But again these make insignificant differences).

2. The most interesting coins found in these two years have been some notable rarities amongst the coins of the Tasciovanus group. Another interesting new feature has been the presence for the first time of coins from the outlying tribes, no. 206, a silver coin of the Coritani, and no. 205, a struck bronze coin of the Durotriges.

The three coins of Tasciovanus, nos. 124–6, for the first time give us a really clear idea of Mack 192. No. 124 shows the obverse legend Tascov, but on no. 126 this is replaced by the letters di. This is certainly the beginning of dias, a legend on several other types. On Mack 192 Tasc and dias are engraved on the same dies, one in front and the other behind the head; on Mack 177 we now have them, instead, as alternative legends. On the reverse of the same coins the robed and hatted figure, seated on an elaborate throne, is making an offering. No. 124 shows exceptionally well the crescent-shaped bowl, fixed on the top of a post, into which the offering is being made. Nos. 125 and 126 for the first time show clearly the object standing behind the throne. This is a post with a base and some kind of knob on top; in the middle there is a shelf with two knobs above, one on either side. It is hard to say what kind of totem or cult object this may represent; possibly some kind of candelabra or even a firedog, if scale can be disregarded.

The next coin of note is the second specimen yet recorded of Mack 183a. The first, found at Sawtry, Huntingdonshire, in 1931, was published by me in 1959.² It is not in good condition, but I thought I could read the obverse legend as vero and perceive a grazing horse on the reverse. The new coin, in excellent condition, proves both suppositions right. On the obverse there appears to be a sunken panel with the legend vero, surrounded by ring and loop ornaments, no doubt symmetrically arranged, (rather than the leaves I thought they might have been from the first specimen). On the reverse, the grazing horse is very clear; its near foreleg is held raised in an unusual position.

¹ Previous articles on the Celtic Coins from the Romano-British temple at Harlow, Essex, have appeared in BNJ XXXIII (1964) 1-6 and BNJ

XXXVI (1967) 1-6. The analysis of percentages is in the second article.

² BNJ XXIX (1958-9) 3.

I also draw attention to a splendid specimen of Mack 182, a half-denomination in bronze, a rare coin. Two other half-denomination coins were also found. Mack 193, a RVES coin, and Mack 181, without known legend. With these additions, only three of the known bronze types of the Tasciovanus group are now missing from the finds at Harlow.

There are no surprises amongst the coins of Cunobelinus, but some interesting examples or runs. Nos. 135–8, all examples of Mack 221 for instance, show how the engraver of this type was determined to display both legs and both wings of a winged male figure, but was defeated by the perspective involved. Two good examples of Mack 245 show a feature which is not usually seen, namely the curling plant in front of the boar on the reverse, which he appears to be sniffing. They also show the last word in the reverse legend to read fi or fil. We also have on the obverses of nos. 139–142 four distinct treatments of the helmet, crest and streamers.

Some magnificent examples of the Cunobelinus bronze, Mack 242, especially nos. 143–4, prompt the remark that the bust was certainly borrowed from Tiberius. Borrowings on coins of Tasciovanus are mostly from coins of Augustus or earlier.

The commonest type is Mack 248, with the Mercury-type head on the obverse and the seated smith god on the reverse. Details of the pattern remain constant, despite a very large number of dies, but the look of the head varies. Indeed, it is possible that there are some irregular dies. Mercury's wings are invisible on no. 179 and no. 180 appears to have a blundered legend.

Although no legend is visible on no. 204, Mack 277, and it is normally classed as uninscribed, there exists a specimen in Commander Mack's collection on which there are positive traces of the legend DV, that is Dubnovellaunos, whose coins are of course regular in Essex.

I have detected no die duplicates. Indeed one of the striking aspects of the Harlow finds is their demonstration of the enormous scale on which these coinages must have existed. I would not yet like to attempt any mathematical exercise as to the number of coins struck, but output was certainly formidable.

3. There are enough bronze coins from Harlow to permit, probably for the first time, reliable conclusions to be drawn as to their actual and intended weight. The most numerous, and thus the group from which most information can be gleaned, are the developed type bronze coins of Cunobelinus with the Tasciovanus legend, that is to say from the mint of Verulamium. An analysis of the weights shows that the most frequent weights lie in the range 2·2-2·5 grams, with the emphasis on 2·40-2·45. Although there are fewer developed type bronze coins of Cunobelinus with the Camulodunum legend, it is plain that the weight and emphasis are the same. The earlier bronze coins of Cunobelinus with the Tasciovanus legend were probably, at least in the main, intended to have the same weight. But Mack 221 tends to be heavy, while Mack 245, which has an odd style and fabric, is consistently light, the weights normally lying in the range 1·75-1·90 grams, that is about three-quarters of the normal weight.

The coins of the Tasciovanus group from Harlow are less numerous and not always now in good condition; but it does not seem that any were worn before being lost. There was unquestionably a weight standard lying in the range 2·2–2·5 grams, but not all the coins seem to conform to it, and the proportion of light weight coins is high. Coins with the Rues and Verulamium legends seem mostly to be of the standard weight, but a good many of those with Tasciovanus' name alone or with Dias legends are definitely of light weight, in the range 1·55–1·75 grams, that is about two-thirds the normal weight.

It may be mentioned that the Dubnovellaunos bronze coin, which is in excellent condition, at 1.66 grams, conforms to the lighter Tasciovanus group. I do not think there can be any suggestion that we are dealing with two different bronze denominations similar in size, only that the denomination was issued at varying weight standards at different times or in different circumstances.

In addition to coins of the normal denomination, there were within the Tasciovanus group larger and smaller coins. The small coins appear to be halves of units in the 2·2-2·5 grams range, though one, Mack 182, at 0·90 grams, is about half the weight of the lighter coins. It is more difficult to say what the large coin, Mack 178, is intended to represent. The Harlow specimen, weighing 5·42 grams, should be compared with specimens in the Hunter collection, weighing 5·67, and in the British Museum, weighing 4·50 grams, the latter in poor condition. A double denomination, based on a unit of 2·40 grams, should weigh no more than 4·80 grams. A 5·70 gram coin, if a double denomination, implies a 2·85 gram unit, if a two-anda-half denomination, a 2·30 gram unit. The latter alternative seems preferable.

There is, however, another aspect. After a long pause during which bronze issues were provincial only, from about 19 B.C. bronze coinage was reintroduced at Rome. The new Augustan coinage was based on an as of copper which should theoretically have weighed some 13½ grams or half a Roman ounce. In practice these asses lay in the range 11–12 grams. The Tasciovanus coin could, then, be seen as the equivalent of a half a new Roman as, in other words a British semis; this goes well with the fact that the obverse bears a head probably derived from a portrait of Augustus. Against this is the fact that asses of Augustus are rarely found in Britain, and, as far as I know, have never occurred stratified in a pre-Roman context. Nevertheless the dating, as well as the concept, fit well enough with what we know of Tasciovanus.

There is, furthermore, conclusive proof that, at a date only a little earlier, probably, than that of Tasciovanus, but before Roman copper coins were being issued, a bronze coin of Gaul could be called a semissos or simissos publicos. The Latin name was simply borrowed. The bronze coins of the Lexovii with this inscription have an average weight of 6.75 grams, or exactly one quarter of a Roman ounce of 27·12 grams, related to a Roman pound of 325·44 grams. The Lexovii were at this time under Roman rule and it does not follow from this that any British coinage was directly related to the Roman pound. On the contrary, the weight of British coins is much more likely to have been based on the fairly well established Celtic pound, illustrated by the weights found at Neath and Melandra, of 309·1 grams.

The normal bronze denomination found in Britain may, in a sense, represent a very much reduced as. There is no doubt that in Gaul the standard silver denomination represents a greatly reduced denarius. This is clear from the presence of an x behind the head on a number of types (for instance, some Kaletedou, Aedui of Togirix type and monnaies-à-la-croix). Their derivation from the denarius is obvious, and, though because of their reduced weight they

¹ Num. Chron. 1955, 80, 86-7, for findspots in Britain: Num. Chron. 1966, 127-8, 133, for weights of Augustan asses.

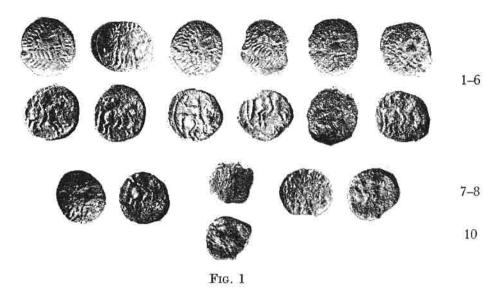
² De la Tour XXVIII 7156, 7159, 7166; for weights see Muret and Chabouillet, 1889, 164 (7151-68). For legends see J. B. Colbert de Beaulieu, Études Celtiques, IX (1960) i, 112-21.

³ Allen, Origins of British Coinage, a Re-appraisal, in Frere, Problems of the Iron Age in Southern Britain, 302; for the Melandra weights, see R. S.

Conway, Melandra Castle, 1906, 106–10; for the Neath and Mainz weights, see Proc. Soc. Ant. XX (1903–5) 189–90. A lead weight from Mount Caburn in Lewes Museum also appears to be a $_{\rm T_0}^{\rm 1}$ of a Melandra pound,

⁴ De la Tour XXXII 8291 for Kaletedou; *ib*. XVI 5138 for Aedui of Togirix type; P. Charles Robert, Numismatique de la province de Languedoc: période antique, in Histoire générale de Languedoc, Vol. XVI, Pl. II 10, for monnaies à la-croix,

are often described in continental literature and in sale catalogues as quinarii, I know of nothing on any of the coins to imply that it was copied from a quinarius. In Britain the silver piece is, like pretty well all British coins, in origin a reduced continental denomination.



COIN GROUP FROM BURIAL AT VERULAMIUM (No. 9 omitted)

There are two pieces of evidence to suggest that the British bronze coinage ran in tens. For many years it has been on record that in the excavations at Colchester there was found sealed a hoard of ten coins of Cunobelinus.¹ I have long been on the look out for evidence that this number was not coincidental. It has now come to light, not at Harlow but at the pre-Roman cemetery in the vicinity of Verulamium at Prae Wood. In one of the burials here, there has been found a hoard of ten coins of Rues, all of the type of Mack 190, and nearly all from different dies.² It looks very much as if this burial offering was intended to represent the traditional denarius, composed of ten asses, even though at this time and for a long time before the Roman as had been reckoned at sixteen to the denarius.

which seems certain on some examples, rules out the reading of the reverse legend as VIIR for Verulamium. The distribution of the coins with Rues legends (the s is added by Mack 191 alone) is identical with that of coins of Tasciovanus (Harlow, Essex; Verulamium, Braughing, Herts.; Upper Stondon, Biggleswade, Beds.; Creslow, Little Kimble, Bucks.; Cleve, Oxon.; Fleam Dyke, Cambs.; Cirencester, Glos.). The total weight of the group of ten coins, 13-2 grams, is not significant, because of their condition, but if the weight of the well-preserved coins, which agrees with the weight of other light Tasciovanus coins, is taken as 1-55 grams, this represents exactly 200 to the Celtic pound of 309-1 grams. I distrust this apparent relationship.

¹ Hawkes and Hull, Camulodunum, 1947, 101, 140.

² Information kindly supplied by Mr. P. E. Curnow of the Ancient Monuments Department of the Ministry of Public Buildings and Works. The ten coins are all of the type of Mack 190; there is perhaps one reverse die link. Four coins in good condition weigh 0.77, 1.33, 1.55, 1.46 grams. Four coins which have clearly lost some weight weigh 1.76, 1.55, 1.52, 1.36 grams. Two fragmentary coins weigh 0.90, 1.00 grams. Nine of the coins are illustrated in this order in Fig. 1. Collectively they establish that the obverse legend in front of the face reads RVII. and that the reverse legend under and in front of the galloping swordsman similarly reads R VII. The presence of the terminal pellets,

Another factor is the well known clay mould from Verulamium, presumably for casting the blanks of bronze coins, which contained exactly 50 holes. This again suggests a principle of tens in the coinage.

Even if the British silver coin was divisible into ten units, there is some reason to think that the Celtic pound was divisible, like the Roman, into twelve ounces; there is also evidence to suggest an alternative division into sixteen ounces. If we take the regular weight of a bronze unit as intended to be about 2.5 grams, it will readily be seen that 10 of these go to make an ounce of 25.75 grams, related on the basis of division into twelfths, to a Celtic pound of 309.1 grams. The light weight coins of Cunobelinus, like Mack 245, then fall into the pattern of about 12 or 12½ to the ounce, while the light weight coins of Tasciovanus, like Mack 175, work out at 15 or 16 to the ounce. An alternative explanation of the light coins of Cunobelinus is that they were struck at the rate of 10 to the ounce, but an ounce on this occasion based on division of the Celtic pound into sixteenths.

There is inevitably, in such mathematical calculations, an imprecision which leaves much room for speculation and adjustment of figures to suit any chosen theory. Nevertheless, the principle of 10 units to an ounce Celtic seems to fit well with the now established weight of the regular bronze unit of Tasciovanus and Cunobelinus, as well as with the 50 holes in the coin moulds. But it does not fit well with the heavy Tasciovanus pieces which, to form an easy series with other British coins, should be either heavier or lighter. Although they are best treated in relation to other British coins as two-and-a-half units, the original sestertius ratio, I suspect it was their relationship to the Roman as that determined their weight. In fact, such a denomination was not needed in Britian and the experiment quickly ceased.

If we may extend the line of reasoning above to other denominations, it can readily be shown that the number of silver coins of Tasciovanus or Cunobelinus struck to the ounce of 25·75 grams would have been 24 or 25 (though this figure does not derive from the Harlow coins). One can, from this, work out a silver to bronze ratio. If the weight of 1 bronze coin is the same as 2·5 silver coins, and the probable value of 1 bronze coin is equivalent to 0·1 silver coins, this indicates a ratio of 25 to 1 for the value of silver to bronze by weight. But if, as is probable, the value of bronze coins was no more than conventional and that they were essentially tokens, this is a ratio without much meaning. It would, however, account for the possibility of wide variations of weight within a denomination, and help over the intractable weight of the large Tasciovanus pieces.

4. This concludes my account of the coins from Harlow. What started as a simple excavation report has developed, through three articles, into a research paper. For this a debt is due to the West Essex Archaeological Group, especially to the director of the excavations, Dr. N. E. France and to Miss B. M. Gobel, for their truly remarkable discoveries. Their finds have not only illuminated an important Romano-British site, but have enabled a new classification to be proposed for the coins of Tasciovanus and his contemporaries, created a new mint and a new order in the coinage of Cunobelinus and thrown a fresh light on the metrology of pre-Roman Britain. At the same time they have added important new coins to the British series. I am happy to say that, by the kindness of the Harlow Development Corporation, the entire collection is to be housed in the British Museum, where it will be available for further study. I also take the opportunity to record my thanks to Professor S. S. Frere and the Institutes of Archaeology of London and Oxford Universities for help in cleaning, weighing and photographing these important coins.





CELTIC COINS FROM HARLOW TEMPLE V

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LIST OF COINS FOUND IN EXCAVATIONS 1967-1968 (g. = grams) (See Plates V and VI).
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BRONZE INSCRIBED—CENTRAL DISTRICT (CATUVELLAUNI AND TRINOVANTES	BRONZE	INSCRIBED-CENTRAL	DISTRICT	(CATUVELLAUNI	AND	TRINOVANTES)
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TASCIOVANUS-	Verulamium Group	
	inus Legend (no. 126 with Dias)	
119.	Mack 170, 2.41 g.	TASC/VER
120.	Mack 176, 1·16 g.	TASCIO/TASCIO
121-3.	Mack 175, 1·72, 1·94, 1·69 g.	8
124-6.	[12] [12] [13] [13] [14] [15] [15] [15] [15] [15] [15] [15] [15	-/TASCI
124-0.	Mack 177, 1·71, 1·71, 2·085 g.	TASCOV OF DI/VIR
With Verulan		
127–8.	Mack 172, 2·14, 1·54 g.	VERLAMIO/-
129.	Mack 179, 2.08 g.	-/VIR
130.	Mack 183a, 1.62 g.	vero/-
131.	Mack 182, 0.90 g. (half-denomination)	VER/-
With Rues Le	egend	
132.	Mack 191, 2.22 g.	RVIIS/-
133,	Mack 193, 1.28 g. (half-denomination)	-/RVII
With no Lege	nd	
134.	Mack 181, 1.30 g. (half-denomination)	
		2001
	Early Types with Tasciovanus Legend	
135–8.	Mack 221, 2·20, 2·84, 2·89, 2·58 g.	CVNOBELINI/TASC
139-42.	Mack 245, 2·40, 1·80, 1·90, 1·60 g.	CVNOBII/TASC F (FI, FIL)
CUNOBELINUS-	Developed Types with Tasciovanus Legend	
143-50.	Mack 242, 2·39, 2·17, 2·26, 2·66, 2·66, 2·76, 2·76, 2·37 g.	CVNOBELINI/TASCIOVANI.F
151-6.	Mack 243, 2·42, 2·20, 2·37, 2·45, 1·54, 2·40 g.	CVNOBELINVS/TASCHOVANII,
157-8,	Mack 246, 2·08, 1·87 g.	CVNOBELINVS REX/TASC
159-67.	Mack 244, 2·11, 2·66, 2·41, 2·33, 2·35, 2.18,	CINODIALITIS MARYANOC
100 01.	1·70, 2·25, 2·45 g.	CVNOB/TASCHOVANTIS
168-80.	Mack 248, 2·30, 2·43, 2·23, 2·50, 2·45, 1·76,	CTIOD/INSCIIOTANIIS
100-00.	2·26, 2·30, 2·46, 1·65, 2·65, 2·95, 2·40 g.	CVNOBELINI/TASCIO
181-90.		CVNOBELINI/TASCIO
161-90.	Mack 249, 2·42, 2·49, 2·33, 2·48, 2·58, 2·44, 2·29, 2·00, 2·37, 2·46 g.	CVNO/TASCI
	Early Types with Camulodunum Legend	a cretarine
191,	Mack 222, 3.53 g.	CAM/CVN
192. 193–4.	Mack 230, 2·49 g. Mack 231, 2·77, 2·86 g.	CAMVLODVNO/- CAMV/CVNO
		Vi Vi
	Developed Types with Camulodunum Legend	e 2997
195.	Mack 250, 2.56 g.	CVNO/CAMV
196-8.	Mack 252, 2·11, 2·28, 2·48 g.	CVNO/CAMV
199–203.	Mack 253, 2·46, 2·12, 1·83, 2·25, 2·04 g.	CVNO/CAM
DUBNOVELLAUN	os (?) or uninscribed	
204.	Mack 277, 1-66 g.	[DV] /-
BRONZE UNINSCRIBED-	-South-western District (Durotriges)	
205,	Mack 318, 3.25 g.	
	NORTHERN DISTRICT (CORITANI)	

SILVER UNINSCRIBED-NORTHERN DISTRICT (CORITANI)

Mack 453, 1.22 g.

206.