

Numismatic material of Beonna's Interlace type  
Tony Abramson

The coins of Beonna of East Anglia (749-c.760) remain scarce outside the Middle Harling hoard.<sup>1</sup> Other than on some dies of Beonna's moneyer Efe, inscriptions are runic. There are four varieties of which the Interlace type is the rarest and the only one without a moneyer named on the reverse.<sup>2</sup> The cruciform iconography of the Interlace reverse is part of the repertoire of the coinage of the early Christian Age.<sup>3</sup> Archibald listed six specimens in 1985, C71-6, and added another, C24, in 1995.<sup>4</sup> These exhibit four obverse dies<sup>5</sup> and one reverse.<sup>6</sup>

Beonna's issues come at the end of the southern early penny ('sceat') coinage. The light coinage of Offa of Mercia and his contemporaries follows.<sup>7</sup> Marion Archibald gave a putative location of the issues of Beonna's moneyers Werferth and Efe as Thetford,<sup>8</sup> and Wilræd near Ipswich.<sup>9</sup> This is also the assumed chronological order of issue, based on fineness, with the Interlace coins placed with the best of Wilræd's.<sup>10</sup> Beonna's coins are comparable with, and plausibly co-ordinated with, the *renovatio* of Eadberht of Northumbria, restoring coinage to a better standard. Werferth's issues seem to be aiming at 75% purity - very much higher than the base final issues of East Anglian Series R - but Wilræd's later issues show significant decline, perhaps to as little as 25%.<sup>11</sup> This implies a lengthier period of production than Archibald has suggested, probably starting before the murder of the Mercian overlord Æthelbald (716-757).<sup>12</sup>

In recent times, a small number of Interlace-related numismatic items in lead have surfaced through metal-detection. These include two objects tentatively classed as weights (both in private US collections), and one possible trial strike. Significantly, these artefacts are inter-related.

### Weights



<sup>1</sup> Archibald 1985 & 1995.

<sup>2</sup> Abramson 2017, 362. Variety 114-40.

<sup>3</sup> Gannon 2003, 165.

<sup>4</sup> The only additional die then added to Beonna's corpus. Archibald 1985, 35 and 1995, 16.

<sup>5</sup> Archibald 1985, 35 postulated a third obverse die on the lost Dorestad specimen, C76, but this is uncertain.

<sup>6</sup> Atypically, reverse dies outnumber obverses in the corpus, suggesting that the obverse die was uppermost.

<sup>7</sup> Metcalf 1993-4, 608 described a possible sceat of Offa. See also Blackburn in Chick 2010, 31.

<sup>8</sup> Archibald 1985, 11.

<sup>9</sup> Metcalf 1993-4, 605.

<sup>10</sup> Archibald 1985, 31.

<sup>11</sup> Archibald 1985, 25-7, 42-8 and 1995, 3-4.

<sup>12</sup> Archibald 1985, 33-4.

*Figure 1: Lead Weight, Interlace obverse, Walbert specimen*

The first specimen (Figure 1) is in a private collection.<sup>13</sup> This lead piece is 19mm in diameter and slightly more than 6mm thick with a total weight of 17.4g. The pattern of the Beonna coin impression is *c.*14mm, the norm for the type. Allegedly, it was found in 2000 near Hemsby in Norfolk.

Obv: +**BMt**+**tf** retrograde, followed by a triangular symbol, central boss, beaded border.

There are uncertain features on the base.



*Figure 2: Lead Weight, Interlace obverse, Gran specimen*

The second specimen, of similar proportions, is also in a private collection.<sup>14</sup> This object is 20mm in diameter and about 6mm thick with a weight of 18.7g. A silver early penny of *c.*14mm diameter is embedded in the lead weight. It is claimed to have been found in Essex.<sup>15</sup>

Obv: interlace pattern, central pellet, vestigial beaded border.

The base is featureless

The similarity between these weights is in the metrics. The difference is not merely in the display of one obverse and one reverse, but that the obverse, Figure 1, is an impression from a coin die whereas the reverse, Figure 2, is that of an embedded early penny.

#### Putative Trial Strike



*Figure 3: Putative trial strike, Abramson collection*

This specimen is recorded as *SCBI*69, entry 1070:

<sup>13</sup> My gratitude to George Walbert for sharing this information.

<sup>14</sup> My gratitude to Arthur 'Artie' Gran for sharing this information.

<sup>15</sup> Archibald 1985, 29 and 1995, 6 indicate that an Essex findspot sits awkwardly with the distribution of Beonna coins.

Interlace type, lead trial piece (?), Beonna of East Anglia 10.10g. Outer diameter 28.5mm.

Obv: +**BM**...**ƿ** retrograde, followed by a triangular symbol, central boss, beaded border.

Rev: interlace design in beaded border. Holed, with raised material in margin beyond die impression. `Found near the river in Ripon, about a mile from Ripon Cathedral`, by Craig Slater, May 2014.

The diameter of both obverse and reverse impressions is *c.*14mm. The obverse can be compared to Archibald, 1985, plate 2, MH42, (Figure 4) and the reverse to MH50-52/C72-4, C71 and C75 (Figure 5).



Figure 4: Wilræd, obverse 2, Middle Harling hoard MH42/C56 (x2)<sup>16</sup>



Figure 5: Interlace reverse 1, Middle Harling hoard MH50/C72 (x2)<sup>17</sup>

## Discussion

The retrograde obverses exhibited in both Figures 1 and 3 are identical. While part of Figure 3 is obscured, the beaded border of the two specimens are again similar. These closely resemble obverse die Wil 04 (Archibald plate 4, 53. [MH42/C56]). This hints at the Interlace design, or at least these numismatic artefacts, being associated with Wilræd.<sup>18</sup> The coin/coin impression dimensions of these weights are consistent with the known Interlace early pennies, being somewhat greater in diameter than other early pennies, including those of Beonna's named moneyers.

Early pennies are generally, 10-11mm in diameter, the Interlace reverses are around 14mm, whereas the light coinage of Offa and his contemporaries is around 17mm.<sup>19</sup>

Being either weakly struck or corroded, the reverse surface of Figure 3 is largely indistinct, and the beaded border of Figure 2 is partly offstruck, making comparison difficult. The images have been orientated to show a similar loop in the top right quarter and transparent

<sup>16</sup> Archibald 1985, 35 and plate 2, no 42. In *SCBI* 63, illustrations for entries 832 and 836 are transposed.

<sup>17</sup> *SCBI* 63, entry 849.

<sup>18</sup> Archibald 1985, 25 also made this association.

<sup>19</sup> Archibald 1985, 25. Chick 2010, 57-131. Note for example Wilræd's coinage for Offa, type 160 at 16mm.

photographic overlay proves the match. These differ from the single reverse die illustrated by Archibald,<sup>20</sup> so present a second reverse die.

The functions of these two types of numismatic artefact differ. The weights, which have sufficiently similar metrics to serve the same function, may well be part of an official system sanctioned by the authority of the king and evidenced by his *imprimatur*. Were this the case then perhaps the Interlace design alone was considered sufficiently well-known to convey the king's authority. The coin/coin impression is more than merely decorative.<sup>21</sup>

The widely scattered find-spots of the two specimens may indicate that a weight system, underwritten by the king's influence, was effective over an extensive geographical area.<sup>22</sup> Given the scarcity of the Interlace type as a coin and its unusually wide diameter, the purpose of this anonymous issue may have been other than as a medium of exchange, but rather for use as a weight standard.

Assuming that 17.4g and 18.7g both stand fairly close to their original, intended weight, they may represent a unit around 18g, but the question of whether this could have been related directly to the coins, to a parallel bullion economy, or to a weights system is too substantial a matter to pursue in the present context.

How do these items relate to earlier lead weights with embedded coins, especially early pennies?<sup>23</sup> Gareth Williams suggested that most such items belong to the Viking Age, but the existence of several with seventh- or eighth-century coins, including some probably made from dies (as in this case), suggests that there was a pre-existing tradition.<sup>24</sup> Was the innovative character of Beonna's coinage one reason why it gave rise to a possibly higher number of weights?

If they represent an issue made under more direct royal auspices for purposes related to royal income and expenditure, this might explain why they were attractive as models for metrology. However, this is conjectural.

Another question arising is whether this larger flan size may have anticipated the migration of Offa and his contemporaries to a broader flan in imitation of the wider deniers introduced by Pepin III in Frankia. In any event, the presence of weights demonstrates that a bullion economy ran in parallel to the use of coins even though, in the previous hundred years or so, early pennies had been issued in substantial volumes.

Regarding what is described here as a putative trial strike, it is apparent from the raised material in the margin beyond the die impression both that a conventional die was used and that the Interlace reverse served as the upper die. Given that a trial strike is more likely to have occurred at the mint (presumed to be Ipswich in Wilræd's case) rather than struck or lost by a peripatetic moneyer on the river bank at Ripon, this second type of artefact may have served a different function. Might the hole evidence its use as a decorative element, seal or

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<sup>20</sup> Enlarged in Archibald 1985, 54, plate 5, Inter R1.

<sup>21</sup> Williams 1999, 24 and 34. Williams doubted that coin weights where obverse and reverse insets alternated were purely decorative. He also argued that Viking weights were relatively imprecise for a rigid weight system.

<sup>22</sup> It seems that after the death of Alfwald of East Anglia around 749, the kingdom was divided between Hun, Beonna and Alberht. Archibald 1985, 33. See Abramson 2017, 363 for the sceat of the latter.

<sup>23</sup> For example, CNG 102, Lot: 1421 on the CNG website

<sup>24</sup> Williams 1999, 36.

receipt? Such a receipt could be for tax, dues, goods or coins. Discussion of these possibilities with the late Marion Archibald failed to arrive at a conclusion.

Two-sided lead seals were standard in the Byzantine world at this time, including in Italy and Rome; from papal usage in the latter it was familiar to the Anglo-Saxons. A two-sided lead bulla of Coenwulf is preserved in the British Museum,<sup>25</sup> the oldest Anglo-Saxon item of its kind. This is not a perfect likeness to the Beonna object: it is larger, and not made from coin-dies. But the hole allows the possibility to be considered.

The Ripon findspot may support the presumed common purpose between Eadberht and Beonna mentioned above. A Northumbrian-East Anglian monetary axis may also be evident from iconographic similarities between Series Q and Y, with their noble quadrupeds and triquetra embellishments, though this is not proven.<sup>26</sup>

It is remarkable that two weights and a putative trial piece have been found all of which are linked to the very rare Beonna interlace type. It has to be recognised that such a cluster of finds raises immediate concerns as to whether these objects are genuine eighth-century artefacts or modern fantasy creations. The results of Professor Ron Bude's trace analysis on these artefacts is given below. These leave little room for doubt that all three artefacts are authentic.

Certainly, these artefacts are early when compared to the material considered by Archibald and Williams respectively.<sup>27</sup> However, the possibility that the inset weight is a Viking product cannot be dismissed. We await further finds, hopefully in an archaeological context, to cast light on this anomalous numismatic material.

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<sup>25</sup> See: The British Museum research webpage, number 1847,0804.1.

<sup>26</sup> In the context of the number of Northumbrian sites where a specimen of East Anglian Series Q has been found, it is worth quoting Hope-Taylor: 'The idea of an East Anglian-Northumbrian political and cultural axis under Rædwald and Edwin is entirely in harmony with the historical facts: it could account for several remarkable points of correspondence between the decorative arts of Rendlesham and Lindisfarne.' Hope-Taylor 1977, 321.

<sup>27</sup> Archibald 1991, 336 lists a double obverse Series S early penny (item 1) and Williams 1999, 23 included a rather anomalous Viking weight with a Series E early penny inset (ex Dr Rogers) at item 5.

## Appendix: Metallurgical Analysis

Ron Bude

The percentage content by weight of the three Beonna artefacts are given in Table 1. These were assessed using a Tescan electron microscope and excessively long live time acquisitions of 500 seconds were performed to obtain the most accurate trace element analyses possible. The results indicate that there were appreciable amounts of the trace elements detected, but the percentages cannot be considered exact.

% by weight	Walbert specimen	Gran, base	Gran, coin	Abramson specimen
Lead	96.8	94		96.6
Silver	1.5	1.7	97.7	0.6
Tin	0.4	0.9		0.6
Iron	1.3	3.1		2.2
Copper		0.3	2.1	

Table 1: Percentage content by weight of Beonna artefacts

The composition of all three items indicate that they are of ancient composition.

Table 2 gives mean silver concentrations for some Beonna coins from Archibald (1985,44). That analysis involved smoothing a part of the edge into virgin metal and then subjecting that surface to a combination of X-ray fluorescence and energy dispersive X-ray spectroscopy on a scanning electron microscope.

The current analysis also used energy dispersive X-ray spectroscopy on Gran's embedded coin, but this was done on the original surface, without smoothing a portion of the coin to internal, virgin metal, as was done by Cowell. That this analysis gave a much higher silver percentage than Cowell obtained is not unexpected, since the current results were from the surface enhanced silver region, and Cowell's were not. A result of 97.9 % could have been obtained from a coin whose internal metal was 50 or 60 %.<sup>28</sup>

Perhaps the most significant aspect of the surface analysis was the presence of approximately 2% copper. It would be very unlikely for a modern forger to include a small amount of copper in anticipation of metallurgical analysis after first sale, since first sale would have been the end point for a forger.

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<sup>28</sup> See Ager et al, (coin N10, Table 2) and Linke et al, page 167, which shows a surface silver concentration of 95 +/- 5 % in a coin whose core analysed only 43.9% silver. Also see Beck et al (coin 3, Table 3) as well as the manuscript in general which shows that natural casting of a coin whose overall composition is between 20-72% silver gives a surface silver composition of 72% (the silver to copper eutectic), and this is before any pre-treatment of the coin to raise the silver content as well as subsequent surface enrichment from corrosion, in addition to the additional additive effects of cleaning which all combined could raise the surface silver content to the levels of this coin.

Moneyer or Type:	Ave. Ag. %	Range (%)	No.
Interlace	51.1	48-54	3
Werferth	70.5	69-73	2
Efe	51.0	44-58	33
Wilred	40.7	23-50	11

Table 2: M.R Cowell's analysis of silver content by weight of coins of Beonna (Archibald 1985, 44)

In conclusion, the items appear to be ancient patinated lead. The compositions have too many trace elements, in percentages too high, to have come from modern lead.

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