Draft text for Perth dating paper

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We are here today because C14-dating of the carbon in soot adhering to some shell-tempered pottery from Perth produced some remarkably early dates. ICPS analysis of these shell-tempered sherds indicated that they were likely to have been produced in the Thames estuary and their visual appearance is consistent with their being London Shelly-Sandy ware.

In London, these vessels occur in a dated stratigraphic sequence from the mid to the late 12th century, were not present in mid 12th-century deposits associated with the Anarchy and were out of use by the first quarter of the 13th century.

However, samples of soot-encrusted vessels from one of the main waterfront sites in the City of London, Billingsgate Lorry Park, also produced C14 dates which are difficult to square with the accepted chronology of the London waterfront, upon which the dating of the entire late Saxon and earlier medieval pottery sequence for London depends.

To test whether these dates were simply affected by some obscure feature of soot deposition (such as the use of coal or peat as fuel) samples of leather from the same deposits in Perth were taken and the C14 dates for these were also centred in the 10th and 11th centuries.

Since every objection which I have raised concerning the sampling and methodology has been countered and the same early dates obtained this meeting was convened by Derek to confront the implications.

Either the accepted ceramic chronology of the 10th to 12th centuries needs substantial revision or there is a systematic discrepancy between C14 dates and calendar years during the mid to late 12th century.

In order to make the issues clear Lyn and I will run through what we consider to be each step of the chain of logic to see if at any stage one of the links could be broken:

a) Are we looking at the same pottery in Perth and London?

An early solution put forward by Derek and his team was that perhaps the shelly ware which was C14-dated in Perth was not in fact a London product but something earlier and from some other area, such as North-West Germany, where shell-tempered wares are found in the 8th to 11th centuries.

This has been comprehensively tested through the comparison of a sample of Perth Shelly wares with examples from the City of London, and elsewhere in the Thames hasin

Not only do the Perth wares match with those from the Thames valley but they also match with samples of glazed London-type ware from both Perth and London (excluding those elements introduced with the shell – calcium, phosphorus, barium and strontium).

Furthermore, the Perth and London shelly wares are wheelthrown whereas those in north-west Germany are handmade. They also differ in rim form.

As a final test, samples of the Perth shelly ware have been selected for thin section analysis. The Thames valley gravels contain a range of inclusions derived from the Cretaceous and Tertiary deposits which outcrop in the basin and, thanks to the reworking of proto-Thames gravels, they also contain grains of Triassic age from midland England.

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This combination does not occur in north-west Europe (not anywhere in England north of the Wash).

These thin sections are still awaited.

b) Could we just re-date the shelly-sandy ware?

In a moment, Lyn Blackmore, who with Jacqui Pearce is the author of a forthcoming study of London Shelly-Sandy ware, will present the evidence from the city of London waterfront (and elsewhere). Shelly-sandy ware occurs in a specific horizon in the city, associated with London-type and Coarse London-type glazed wares of a variety of types. These types together are absent from deposits associated with the use and backfill of the mid 12th-century motte found to the south of St Paul's cathedral, occur in large quantities in deposits dated by dendrochronology to the later 12th century from a variety of sites along the waterfront and are clearly residual by the early 13th century. Wherever London shelly-sandy ware occurs outside of London it is invariably associated with Coarse London-type ware and London-type ware:

Hollingstedt – the north sea outport for Schleswig.

Bergen

Eyemouth

Perth

Leith

It seems from the chemical analysis that London SSW was produced from the same clay as the glazed London-type wares and from the distribution around the North Sea it seems likely that the two wares were cargoes on the same ships.

One cannot re-date London SSW without also re-dating London-type ware.

c) Is there no room for manoeuvre?

Well, one of the dated Perth vessels looks different at x20 magnification and I could be persuaded that this was a handmade precursor to London SSW. We will know more once the thin section has been made and examined. The others, however, are standard in appearance and composition.

There is a very small amount of room for manoeuvre which could take these wares back to the 1150s, but it is inconceivable that they could go back further without also having to re-date the Anarchy!

One should be aware that attempts to date mid 12th-century pottery by its association with adulterine castles has a long and discredited history, thanks to the assumption that all these castles were abandoned immediately after the accession of Henry II and the restoration of royal authority. John Hurst's frustrations with this line of reasoning ended up with his classic paper on White Castle and the dating of medieval pottery. Since John's work no one has successfully put forward pre-Anarchy dates for any of the glazed ware industries which emerged during the second half of the century:

Ham Green ware

Developed Stamford ware

York Glazed ware

Hedingham ware

If anything, the view seems to be that lesser-known and more minor glazed ware industries which workers have attempted to take back to the late 12th century, such as Grimston ware or Scarborough ware, actually started later.