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On the Dating of Medieval Pottery

– in the Light of Recent Finds from Ribe

by PER KRISTIAN MADSEN

This paper discusses some problems of dating medieval pottery, which are relevant not only to Ribe. I will begin by summarizing some main points in Danish research on medieval pottery. A more thorough review of the literature on this subject has been published elsewhere (Madsen 1987).

THE DATING OF LEAD-GLAZED WARE – A STANDARD QUESTION

A landmark in medieval studies – not only in pottery research – was the late Vilh. la Cour's publication of the totally excavated castle mound of Næsholm in North Zealand (la Cour 1961). Næsholm, which is not mentioned in any preserved written source, is only a small moated site, with the remains of a brick tower, which was uncovered by la Cour. The excavation technique did not entirely correspond to present-day methods, and lacks a stratigraphic basis for the dating of the mound and the finds. It is astonishing that la Cour claims that 90% of the 7000–8000 sherds of pottery on Næsholm were lead-glazed (la Cour 1961: 115, 136) (fig. 1). The dating of Næsholm, or its period of function, relies on the find of 302 coins, only 140 of which could be identified, and which were scattered in the layers. The identified coins were struck within the period 1241–c. 1332, and accordingly la Cour dates the occupation of the site to ca. 1240–1340 (la Cour 1961: 118). This proposed dating of Næsholm may have seemed convincing, since it fits almost precisely the so-called "standard dating" of lead-glazed pottery in northwestern Europe – 1250–1350 – which can be traced through the literature back to the works of G.C. Dunning (cf. Hurst 1964; Lüdtke 1985: 56). This dating, however, has mainly to do with the distinctive group of lead-glazed pottery that is termed "highly decorated", a group that consists mostly of elaborated jugs, and which spread from the coastal zones of the North Sea and the English Channel. The standard dating does not allude either to the dating of medieval lead-glazed wares as such, or to the occurrence of glaze in the area bordering the North Sea (cf. Hurst ed. 1971; Verhaeghe 1982).

This was already clear when the term "standard dating" and the whole problem of dating medieval pottery were introduced to Danish medieval archaeologists by Mogens Bencard in his paper on the anthropomorphic glazed jugs of Southern Scandinavia (Bencard 1973). These jugs may themselves be considered examples of the highly decorated wares, and later research has shown a rather differentiated development and dating of this special kind of pottery decoration (Bencard 1979; Madsen 1980; Broberg & Hasselmo 1981; Erdmann 1982). In his conclusion to the paper in 1973 Bencard is aware of the fact that lead-glazed jugs are not limited to the period 1250–1350, although he accepts this frame as a temporary working hypothesis (Bencard 1973: 170). This well-considered conclusion became for the coming years the standard reference for Danish publishers of medieval pottery, whenever glazed pottery occurred in an excavation (cf. Madsen 1982 and 1986 with references). In a paper on a few finds of pottery from Ribe, I tried to demonstrate that this too uncritical use of the standard dating – and of the more or less tentative datings of various sorts of imported pottery – will be seriously misleading, especially when it comes to the interpretation of find complexes (Madsen 1982). That the standard dating really constituted a problematic restriction became clear from excavations in Ribe, the results of which have by now been confirmed by later excavations (Madsen 1988a), cf. below, and could furthermore be demonstrated in a correlation between the standard dating of glazed pottery and the results of the excavation "Århus Søndervold" in Århus (Andersen, Crabb & Madsen 1971).

Fig. 1. Three of the best-preserved, lead-glazed and decorated jugs from Næsholm. After la Cour 1961. Scale 1:4.

In Århus only a few pieces of imported lead glazed pottery were found. Glazed sherds, however, do occur rather early in the layers, as the detailed schemes in the publication show. Although the excavators tend to believe that some glazed sherds have been mixed into older finds by accident (Andersen, Crabb & Madsen 1971: 96), it seems clear that the use of the standard dating on the material as a whole would have increased the dating of the layers and finds from the 13th and 14th century by at least 25 or 50 years (Madsen 1982: 88).

THE GREY-FIRED WARES

This postponement would also include the change from soft-fired greywares to hard-fired wares, which is dated to the beginning of the 13th century (Andersen, Crabb & Madsen 1971: 263). In my 1982 paper, I recommended that pottery dating be based on the mass-produced, dominant and probably mostly local greywares, in order that various locally founded chronological and typological schemes could be constructed, independent of such fixations as the standard dating of glazed pottery and the accidental occurrence of imports (Madsen 1982: 88). In the following, I shall try to apply these points of view to some finds from Ribe, which were either not known in 1982 or were not yet ready for study. A full account awaits publishing (Madsen 1988a).

The grey-fired sherds are separated into two groups according to fig. 2. The system also includes other main sorts of pottery (cf. the "Rahmen-Terminologie" by a group of North German archaeologists: Erdmann *et al.* 1984; Lüdtke 1984), and if necessary it may be extended by a further group, which could be called "A0", corresponding to the "godstype I" (Viking Age and Early Middle Ages) of Århus Søndervold (Andersen, Crabb & Madsen 1971: 76). A1 is an intermediate group, in firing and tempering, and a forerunner of A2. Group A2 consists of hard-fired, well-tempered and often thin-walled

A		B		C		D		E	number	weigth grams	museum number
1	2	1	2	1	2	1	2				

Fig. 2. Classification of pottery finds. The following groups are used: A1 reduced, rather soft wares. A2 reduced, hard fired wares. B1 lead-glazed wares, red- and/or grey-fired. B2 as B1, but with applied slip or decoration in pipeclay. C1 sherds of unglazed and partly glazed pipeclay. C2 glazed pipeclay. D1 Pingsdorf wares. D2 near stoneware, including Paffrath ware. E stoneware.

Phases	Pottery groups A 1	A 2	B 1	B 2	C 1	C 2	D 1	D 2	E	number	weight
X	41	26	11	22		13	3	7		123	1750
IX	9	2	1			4				16	127
VIII	2	4	1			2				9	60
VII	7	3	1			8	1	4		24	170
VI	4	2						3		9	50
V	81	98	2	6		16	5	7		215	2250
IV[1)]	65	71		1	1	6	6	11		161	3065
III	79			2		2	3	5		91	845
II[2)]	59				3		3	1		66	1550
I	29				2	2	2	4		39	525
Total	376	206	16	31	6	53	23	42		753	10392

1) House with wall post (with sapwood and bark), felled in the autumn of 1179.
2) Refuse container of wooden planks, from trees, which were felled not earlier than the year 1144.

Fig. 3a. All pottery finds from all phases of the excavation at Sct. Catharine's Square in Ribe. The datings of the various phases rely partly on dendrochronological evidence.

Phases	B		C					Total
			Andenne		North France (Rouen)			
	B1	B2	partly glazed/ glazed	glazed, rouletted	bichrom.	green glazed	Others	
V – *c.* 1225	2	6	3		4	4	5	24
IV 1179/80 –		1	3	1		2	1	8
III Before 1179/80		2					2	4
II after 1144			3					3
I *c.* 1150			4					4
Total	2	9	13	1	4	6	8	43
	B: 11 sherds		C: 32 sherds					

Fig. 3b. The glazed pottery including both groups B and C from phases I–V in the excavation on Sct. Catharine's Square. After Madsen 1986.

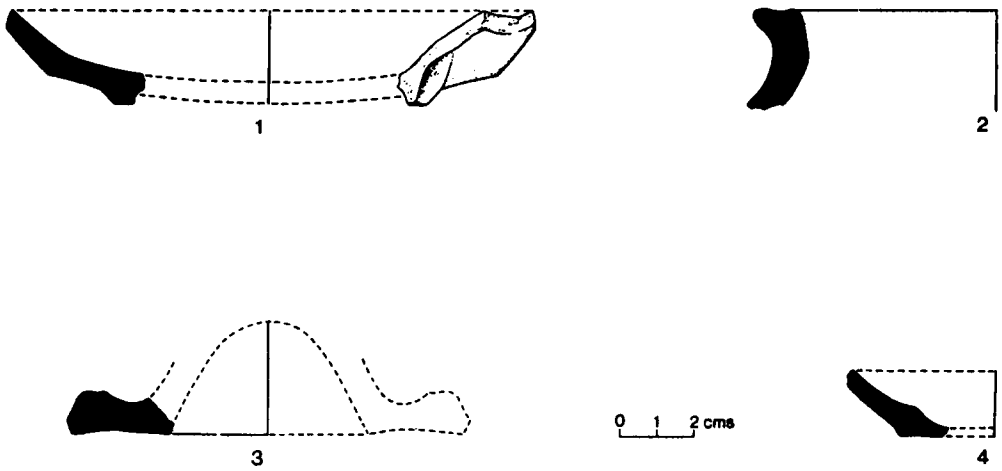

Fig. 4. Sherds of Andenne pottery from Sct. Catharine's Square, belonging to the second part of the 12th century. 1: base sherd from a partly glazed jug, phase I. 2: rim sherd, probably from a partly glazed pot or bowl, phase II. 3: base sherd from a candlestick, phase II. 4: base sherd from a partly glazed jug, phase IV. After Madsen 1986 (with further references). Drawing Aage Andersen.

greywares of the High Middle Ages, corresponding to "*godstype II*" in Århus.

Fig. 3a–b gives the total number of sherds along with further separations of the glazed pottery from the five oldest phases of an excavation near Sct. Catharine's Church in Ribe. This excavation revealed the remains of several houses, one on top of the other. The best-preserved house was a wooden building (phase IV), whose erection was dated by dendrochronological analysis. This proved that the house was built at the end of the year 1179 or in 1180. Underneath this house was in phase II a wooden construction, probably a refuse container, which was dated to the time after 1144 (Madsen & Mikkelsen 1985). The glazed pottery in fig. 3b belongs to 21 separate layers, which are all related to the various phases. The number of glazed sherds – 43, which corresponds almost to the number of vessels represented – comprises 7.5% of all sherds in phases I–V, and it appears that lead-glazed pottery was used in Ribe before 1200 (Madsen 1986).

Even so it still has to be discussed where this glazed pottery was made – 32 of the glazed sherds have a fabric of pipeclay, which means that they are probably all imported. This is, for instance, the case with the pieces of Andenne pottery that could be recognized (fig. 4). Of course pipeclay as a raw material could have been imported to Ribe, as it probably was in the early 12th century for the covering of unglazed floor tiles in the church of Sct. Laurentius in Roskilde (Møller 1968).

It needs mentioning that Hartwig Lüdtke, in his book on the large pottery find from "Schild" in Slesvig, suggests that some distinctive, small jugs or flacons with a blackish lead glaze might have been made in Slesvig from imported pipeclay (Lüdtke 1985: 55). The dating of these vessels in Slesvig is somewhat imprecise (c. 1200), but recently two similar miniature jugs have been recognized in Lübeck and in Alt Lübeck, which are both dated by dendrochronology: Lübeck before 1173 and Alt Lübeck c. 1100 (before 1138) (Andersen in print, personal communication from H.H. Andersen, Moesgaard and W. Erdmann, Lübeck, cf. Erdmann

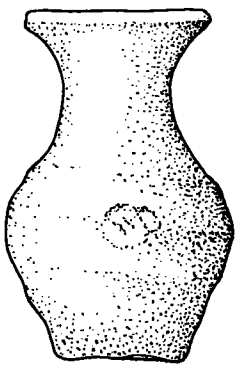

Fig. 5. Miniature jug or flacon with blackish lead glaze. Inside the jug is a small ball of fired clay, which may have helped to keep the contents fluid, when shaking the jug. After Petersen 1985. Drawing Aage Andersen. 1:1.

Trench B Layer	A 1	 2	B 1	 2	C 1	 2	D 1	 2	number	weight	ASR 1 no. X
BC	1	21	3	2			4	3	34	740	14
BC		38	20	5		5	4		72	1200	15
BE•		38	226	7		4	1	9	285	2760	16
BF••		4	7						11	200	17
BG		180	4	4		2	7	7	204	2221	18
BH			1	1		1			3	20	19
BT		150	18	14		26	1		209	1750	20
BAN		25				3			28	147	21
BAR		4							4	357	22
BK	21	229	7	12	3	17	4	20	313	2646	23
BN		7							7	46	24
BAO		20						1	21	95	25
BAS	2	4	1					2	9	60	59
BL	17	22				1		7	47	685	26
BM	152	1	4	19		13	2		191	988	27
BP	180					4	10	18	212	1530	28
BAP	210				1	8	3	15	237	947	29
BAU	25						3	15	43	219	30
BQ=BAQ (BAÅ)	202					1	14	31	248	2263	31
BBA	4							4	8	82	32
BAV	1	6			1		1	13	22	257	33
BAW	19					1			20	321	34
BBB	4								4	33	35
BR	29			2		1			32	540	36
BR_1	244						8	80	332	1667	37
BS								1	1	5	38
BT	87						19	24	130	1059	39
BU	8							1	9	50	40
BV	35							3	38	200	41
BX	134					1	6	21	162		42
BAH	1								1	10	43
BAI	9								9	160	44
BW	6					1	7		14	80	45
BW II	70		1			2	4	18	95	650	46
BY + BZ	81	(5)			8	2	25	26	147	1230	47
BAA	45					2	8	36	91	940	49
BAB	16	2				2	5	1	26	210	51
BAC	27					1	2	3	33	240	52
BAD	11						1		12	160	53
BBG	1								1	10	54
BAE ? BK	19						2	1	22	275	55
BAE	77						2	5	84	1030	56
BAG	58			1	1		1	9	70	560	57
BAK	10				1			1	12	230	58
Total	1806	756	292	67	15	98	144	375	3553	28873	

Fig. 6. All pottery finds from the excavation at Riberhus which could be related to the main section. A drawing of the section was published in JDA vol 2, 1983, p. 164. Only those layers that contained pottery finds are shown to the left. Brickbats occur only in layers BC to BAN, however not in BH and BT. • indicates coin finds, see fig. 7. A code for the groups of pottery is given in fig. 2.

1984: 108). Such miniature vessels are also found in Ribe, but unfortunately none of them can be firmly dated (fig. 5) (Petersen 1985: 106; Madsen 1988 (b)).

The remaining 8 sherds are all from red-fired vessels, and only scientific analysis could show, whether the raw material for these sherds is Danish or foreign. It is a fact that green lead glaze is used on a decorative frieze of slender columns and arches which forms the upper parts of the side walls of the brick church in N. Løgum some 40 km south of Ribe (*Danmarks Kirker, Tønder Amt*: 1525). A dendrochronological dating of the timber from the original, preserved roof of the church indicates that the roof was constructed 1188 ± 1 year (Madsen 1986: 62). Lead glaze on probably locally made floor tiles, which were laid at the end of the 12th century in the Cistercian abbey church of Sorø, central Zealand, also indicates that knowledge of glazing was at hand in Denmark before 1200 – and probably not only among brick- and tile-makers (Als Hansen 1982). This seems all the more convincing, since red-fired, lead-glazed pottery is also present in Lübeck at the same time, dendrochronologically dated before 1173 (Erdmann 1985; 1986).

Fig. 3a also shows that the change from A1 to A2 is gradual, as it runs through the phases IV–V. This means that this transition starts in the last decades of the 12th century, and that it takes place in the same period as the forerunnes of the glazed jugs arrive in Ribe, at a time before such imports as Pingsdorf- and Paffrath-wares begin to leave the market (cf. Bencard 1973: 173; Madsen 1982: 80). These tendencies from a rather limited but well dated excavation can be further illustrated by other finds from Ribe (cf. Madsen 1988a).

In 1980 a trial excavation was carried out in the centre of the massive earthwork of the castle of Riberhus. The topographical results were briefly mentioned in JDA (Jensen, Madsen & Schiørring 1983), when all the finds had not yet been investigated. The scheme (fig. 6) shows all pottery sherds which could be related to the main section. No relevant dendrochronological dates are at hand, and the few coins found all belong to the uppermost zone of layers (fig. 7). They testify that deposition did not cease earlier than after 1300 – although at a time when no real stoneware had yet reached Riberhus.

All layers from the bottom and including BAR were devoid of traces of bricks. The estimated dating of the beginning of brickbuilding in Ribe Cathedral is c. 1200 (*Danmarks Kirker, Ribe Amt*: 188ff., 242; *Sønderjyllands Amt*: 2657, 2664), whereas the earliest known use of bricks in medieval Denmark takes place c. 1160 in Ringsted on Zealand. Still, we know of the great brick wall at Dannevirke in Southern Slesvig, built by Valdemar I before his death 1182, almost contemporary with the church in N. Løgum (*Danmarks Kirker, Sønderjyllands Amt*: 2640, 2664, 2740). In Lübeck the first traces of bricks being used for the construction of town houses are recognized in the 1170s (Erdmann 1986: 375). All this could mean that bricks might have been in use in Ribe some decades before 1200, since their presence in the cathedral does not need to be their primary introduction in the town (cf. I. Nielsen 1985: 54).

Layer	*Coins*		
BE	Erik Glipping	(1259–1286), Ribe,	(MB 214 or 219)
	Erik Menved	(1286–1319), Ribe,	(MB 471)
	Duke Valdemar	(1283–1312), Slesvig,	(MB 492 var.)
	1 coin with no stamp		
BF	1 coin, not identifiable		

Fig. 7. Five coins were found in the layers of Riberhus – four of them are from BE, the last one from BF. The coins have been identified by the Royal Collection of Coins and Medals, The National Museum. The abbreviation MB refers to Mansfeld-Büllner 1887.

Whatever the case, the scheme fig. 6 shows that the relative development of wares is the same at Riberhus as in the excavation on Sct. Catharine's Square. It indicates the presence of glazed pottery at Riberhus as in the town before 1200, although this does not mean that this or any other ware was in common use or known to the same degree all over Ribe. Most of the glazed pottery is foreign (C1 and C2), but we are still left with the problem of the origin of the red-fired sherds (B1, B2). Predominant among the early imports are Paffrath and Pingsdorf wares, which are both frequently met with in Early medieval contexts in Ribe (Bencard 1972; Madsen 1982). In this respect it should be noted that sherds of near stoneware are found already from layer BT, and although their amount is only small, their relative part is clearly growing – as the Pingsdorf and Paffrath wares gradually disappear. This points to a rather early date for the incipient transistion from Pingsdorf and Paffrath to near stoneware, a good deal earlier than suggested from the coin hoard from Obbekær some 8 km east of Ribe, where a near stoneware "Kugelbecher" with splashes of red iron wash or "Sinterengobe" was buried in c. 1240–50 (Liebgott 1978a: cat.no 15; Madsen 1988c).

If we return to the largest part of the sherds, the groups A1 and A2, we can observe a gradual change between these two groups, which starts before the occurrence of bricks. According to this, the change seems to be fulfilled before 1200 or even earlier. In Århus, the bottom zone of that series of layers which are dominated by the hard-fired greywares (*godstype II*, corresponding to group A2 in Ribe), did not contain any traces of bricks, and the first bricks occur c. 1200, followed by lead-glazed bricks by the middle of the 13th century (Andersen, Crabb & Madsen 1971: 225). The relative development in Århus and Ribe seems to be synchronous, whereas there might be some differences in the exact datings. In Århus, the change between the two groups of greywares, which are discussed here, is dated to the beginning of the 13th century. The finds from Sct. Catharine's Square and from Riberhus point to a somewhat earlier dating, but it is important to notice that an intermediate group similar to Ribe's A1 also exists in Århus, where it is dated to the 12th century (*ibid.*: 81–83 (Ic–e); 263). These rim shapes have been paralleled by those finds from Ribe that were published in 1982 (Madsen 1982), and although there may have existed some real chronological and formal differences between the pottery from the two towns, a somewhat earlier dating of the change of the Århus-finds could be considered.

In the town of Slesvig it seems through the work of H. Lüdtke that a change in the 12th century grey-fired wares runs almost parallel to that in Ribe. Lüdtke does not establish a separate group as A1, but in his general remarks there are several indications showing that this would probably have been possible (Lüdtke 1985: 43). The existence of a group like A1 is also indicated by some North German finds (Schindler 1952: 120; Erdmann 1984: 103), especially the pottery from the dendrochronologically dated well in the castle of Lübeck from the second part of the 12th century. The well itself was built in 1155 and used only during that century (Fehring 1979). Pottery like A1 has also been distinguished in Ålborg, Viborg and probably Randers (Kock & Vegger 1982; Krongaard Kristensen 1982; Stürup 1977). Further probable parallels are from the later phases of the settlements Omgård, Vorbasse and Sædding in Jutland (L.C. Nielsen 1980: 205, fig. 32, 4–7; Hvass 1980: 171, fig. 34,2,4 & 6–7; Stoumann 1980: 117, fig. 28).

It appears that the separation of the grey-fired pottery from larger finds into three different groups, as described here, may help to distinguish the pottery of the Early Middle Ages (A1) from that of the following period (A2). The dating of the period of change between these two groups of pottery can be indicated to some degree, although some real geographic differences may exist. It must also be possible to distinguish wares of group A1 from Viking Age pottery (A0). The occurrence of A1-wares and shapes (*exclusively* globular pots with everted rims) in Viborg in circumstances that are clearly datable to the decades immediately around the year 1000 (Krongaard Kristensen 1982) indicate that this somewhat harder-fired type of pottery, which was formerly considered to be purely medieval, was also present in the late Viking Age. I am here dealing only with the western part of Denmark, leaving out the Early medieval Baltic wares, which dominated Eastern Denmark until c. 1200 (Liebgott 1978b: 10).

Those tendencies which the finds from Ribe allow us to discuss and compare with results from abroad point to a pronounced need for thorough publication of stratigraphic excavations from various parts of Denmark. This work has to include the Baltic wares, and it ought to establish series of local chronologies, which can in turn be compared with oneanother. All ways of ordering pottery are subjective, at least to some degree, and so is this one. I nevertheless believe that the main criteria have to be based on as many features as possible: that is on the tempering, firing and general appearance of the pottery, and not merely on rim forms or vessel shapes, which are only secondary indications of date. On the other hand, I do not agree that this prevents us from dating pottery more precisely than within periods of a hundred years (Lüdtke 1985: 138).

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NOTE

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