each decorated with the family crest, in the 16th century the size of the largest service mentioned in inventories and other records grew by leaps and bounds: in 1545 the viceroy of Naples ordered a service of 380 pieces from Venice, while the aristocratic Gonzagas of Novellara acquired a service of 610 pieces from Faenza in 1590. This proliferation of tableware was accompanied by an increase in the complexity of etiquette, and by a parallel increase in the publication of manuals on the art of gracious dining (*ibid.*, 23).

If we correlate what we know about the development of maiolica with the information collected by Goldthwaite, the following picture emerges. In the early Renaissance, wealthy Italians began to fill their palaces with luxurious possessions, and to adopt a progressively more elaborate style of entertainment. At the table and on furniture designed for displaying portable objects, fine maiolica assumed a significant role. The process may be divided into two phases. In the first phase, which probably began in the 1440s, decorators adopted designs borrowed from Spanish lustreware and later developed the 'peacock feather' and 'Persian palmette' motifs. In the second phase, which began c. 1500, they introduced decoration in which the whole surface was treated like a canvas for painting. This process reached a peak between c. 1515 and 1525, when much of the finest istoriato maiolica was made.

BIBLIOGRAPHY

Bortolotto, A. 1981, Storia della ceramica dagli albori alle fine della Repubblica. Sansoni.

Bortolotto, A. 1987, Maioliche veneziane. Museo nazionale del Bargello.

Celebrino, E. n. d. (later 16th century), Opera nuova che insegna apparechiare una mensa. (n.p)

Cora, G. 1964, 'Sulla fabbrica di maioliche sorta in Pisa alla fine del '500', Faenza 50, 25-30.

Goldthwaite, R. A. 1989, 'The Economic and Social World of Italian Renaissance Maiolica', Renaissance Quarterly 42, 1-32.

Marsilli, P. 1982, 'Ars Orcelariorum: la corporazione dei maiolicari di Faenza', *Faenza* 68, 13-23.

Messibugo, C. 1549, Banchetti, composizioni di vivandi apparecchio generale. Giovanni de Buglhat et Antonio Hucher.

Piccinni, G. 1981, 'Per lo studio della produzione di ceramica e vetro nella prima metà del Quattrocento', Archeologia Medievale 8, 589-600.

Watson, W. M. 1986, Italian Renaissance Maiolica from the William C. Clark Collection. Scala Books.

Wilson, T. 1987, Ceramic Art of the Italian Renaissance. Brit Mus Press.

David Whitehouse
The Corning Museum of Glass

MEDIEVAL EUROPE 1992: THE CERAMIC COMPONENT

Of the many papers presented at Medieval Europe 1992, the International Conference of Medieval Archaeology held at the University of York in September 1992, over fifteen were concerned specifically with pottery, while several others referred to pottery in some detail to illustrate other points. As a whole the period covered spanned the 4th-16th centuries. The conference was designed to give a panorama of work in progress rather than definitive statements; it was organised as a series of parallel sessions and different aspects of pottery production and

distribution were included under the following thematic headings: Maritime Studies (B); Technology and Innovation (C); Exchange and Trade (E). The most important sessions for ceramic studies were C6 (Lustre Ware and Tin-glazing), C9 (Innovation in Pottery Production in the Early Medieval Period) and E4 (Ceramics and Trade).

Summarising the content of such a wide range of papers is not an easy task, not least because (in this reviewer's opinion) many papers spanned more than one of the conference themes, while a few were listed under the wrong session heading. On the whole, a combined chronological, geographical and thematic approach would seem to offer the most useful synthesis of who is working on what and where (the period divisions are those of the reviewer not the conference).

Most contributions were included in the abstracts (English and German, and some also in French) distributed at the conference; some are published in the pre-printed papers; some are included in both, while others appear in neither. In the following, papers presented and/or included in the pre-printed papers are indicated by '*,' abstracts by '*.

The 5th to 8th centuries

Four papers were devoted to this period, of which two were mainly concerned with the ethnic origins of Saxon pottery. The first presented some preliminary results of research into Merovingian pottery from recent excavations of settlement sites along the Flemish coast, notably Roksem and Zerkegem, near the former castellum of Oudenburg, probably part of the Litus Saxonicum (Hollevoet: C9e*). Two broad categories of pottery were defined: local handmade wares (mostly grass-tempered) and wheel-thrown imports (the minority, mainly Eifel wares). Grass-tempered pottery is rare elsewhere in Flanders, and the Merovingian fabrics found at Oudenburg are unlike those from the only other excavated domestic site at Kerkhove (Scheldt Valley). The organic and decorated wares are most like those from Anglo-Saxon sites in south-east England, and it was suggested that the area was occupied by small communities of Saxon origin. An interim on the pottery from this area has recently been published elsewhere (see Reviews, this volume, p. 98).

The second paper discussed the interpretive potential of stamped decoration found on pottery of the Anglo-Saxon period (Briscoe: C10a#), which is being studied by the Archive of Anglo-Saxon Pottery Stamps (see also *Medieval Ceramics* 17, 65-6).

New information on kiln technology was provided in an interim report on the 1991 excavations of four Merovingian kilns in Maastricht (Panhuysen: C9f*); a summary of the sites and finds has recently been published elsewhere and so they are not discussed here (see Reviews, this volume p. 98).

Ceramic distribution was represented by a discussion of past and current work on the long-standing problem of 'Gaulish' artefacts in 6th- to 7th-century western British and Irish archaeological assemblages, notably 'E' ware and 'Merovingian' glass (Wooding: E6b*). Distribution analyses in France and Great Britain showed that 'E' ware and the associated glass types are found on sites which do not have Saxon affinities and that they probably originated in western or northern Gaul and arrived in Britain via the western sealanes.

The 8th to 12th centuries

Of the six papers outlined below, five attempted, in different ways, to explain developments in pottery production within a socio-economic framework, and most combined the themes of technology/innovation and trade/exchange. Two were regional studies; three were town-specific. The sixth paper, although listed under 'Exchange and Trade', concentrated primarily on aspects of production.

For southern Europe, there was a regional study of the repercussions of socio-economic change on 7th- to 9th-century pottery production and distribution in the south-east Iberian Peninsula (Gutiérrez-Lloret: E3b*). This argued that the collapse of the Roman trade networks in the 5th and 6th centuries had two effects, albeit with regional variations. Firstly, large-scale importation of mass-produced African and eastern wares ceased by the early to mid-7th century. Secondly, the primitive local industries, which had coexisted with the 'industrial' wares and shared the same markets, enjoyed a monopoly which enabled them to adapt and survive. Within this scenario, the typological study of cooking pots and other common household wares from settlement sites (no kiln sites were mentioned) has provided a key to defining cultural areas and social groups. Despite problems of chronology, these show that the establishment of Islamic rule in Andalucia in the 8th-10th centuries and the introduction of new technologies led to a gradual move from seasonal domestic production within a primarily agricultural economy to a wider range of consumeroriented forms. By the late 10th century, increasing urbanisation resulted in a new market economy; glazed and decorated wares produced in urban centres reached the hinterland through new trading routes while the handmade coarsewares became standardised and produced for distribution within the regional, rather than local, market.

For northern Europe there was a study of regional variation in pottery production and ceramic exchange in the southern Netherlands, centred on Kempen (Verhoeven: E3d*). The 'ceramic image' of the study area was outlined, showing that imported wares dominated from the Carolingian period until the 14th century. Regional production changed in the 9th century from Carolingian wheel-thrown wares produced in 'workshops', which comprise up to c. 20% of assemblages in the study area, to domestically produced handmade wares. The latter account for up to a third of the 10th/early 11th-century assemblages but disappeared in the late 11th century. This pattern was compared with that for selected sites to the north of the Rhine, where the handmade 'Kugeltopf' dominated throughout this period and imports were less abundant. For the study area the 'ceramic image' for the 9th-13th centuries was seen as reflecting the influence of ecclesiastical and feudal forces and lack of a free market. From the late 13th century, however, the development of towns led to the creation of new pottery workshops operating within a market-based economy. Aspects of this work have recently been published elsewhere (see Reviews, this volume, p. 98). The equivalent picture for north-west Germany (Ludtke: C9d#) was unfortunately missing — it promised some interesting comparative data on local/regional production of the 'Kugeltopf' and other wares in the 9th-11th centuries.

Two papers covered the development of ceramic industries of towns with similar economic, political and religious status. For York, it was demonstrated that a combination of external forces and local demand led to a transition from the simple handmade wares of the 8th century, which were produced for domestic consumption only, to the commercially produced wheel-thrown wares of the mid 10th century, which were available in a wider range of forms and were more extensively distributed (Mainman: C9a*). The technological and typological development of York ware (which appears to have occurred within a short time scale in the late 9th century) and of the mid 10th-century Torksey-type ware, and the appearance of glazed wares in the 10th century were all placed within the context of the economic growth of York as a regional centre able to support a range of craftsmen to supply the needs of the growing population.

A similar phenomenon seems to have occurred at Saint-Denis, where the first glazed wares are currently dated to the early 10th century. A paper by Meyer-Rodrigues (C9b*) gave a preliminary outline of the range of fabrics, forms and decorative

traits present in 10th-century contexts in Saint-Denis; the glazed wares represent a new departure in ceramic forms and styles which seems to have emerged fully developed, with no evidence of an experimental stage. It was suggested that technological innovation was stimulated by and flourished within the wealthy and elite environment of the abbey at Saint-Denis, the social and economic status of which is attested both in the literature and by numerous other high quality finds recovered from 10th-century deposits.

For Ribe, Denmark, the approach was broader, showing how the range of wares imported between the 8th-10th centuries may have influenced the local products; the distribution of the local and imported wares found in 8th- to 12th-century deposits has allowed some conclusions to be drawn regarding the spatial organisation and development of the town and its industries (Madsen: C9c#).

Finally, there was an industry-specific study of pottery production in Staffordshire from the 9th-15th centuries (Ford: E3f*) as evidenced by archaeology, scientific analyses and documentary research. In the pre-printed paper each period entry follows a standard format covering common name, fabric, typology and decoration, kiln types (where known), dating (scientific and/or stratigraphic) and distribution. Radiocarbon dates suggest that Stafford ware (=Stafford-type, Chester-type or West Midlands early medieval ware) may date from the 8th/ 9th century, but it is mainly found in early 10th- to mid 11thcentury contexts on sites having strong royal and/or ecclesiastical links. The next type, 'Sandy Utilitarian ware' (speaker's nomenclature), is quite different and has no overlap with Stafford ware; it is found in 11th- to 14th-century contexts across the West Midlands; no kilns are known. The earliest 'Buff/white sandy ware' is that from kilns in Stafford to the 12th to 14th-centuries, but most most material from the 13th-century production site at Chilvers Coton, where the 42 kilns are thought to represent a 'workshop industry'. The ware has a wide distribution but is most common in south Staffordshire. The 'workshop industries' of 'late medieval orange ware'/Midlands Purple, dated to the late 13th to 15th centuries, and Cistercian ware were also summarised.

The need to relate pottery manufacture and distribution to wider phenomena such as market or socio-economic forces is clear. However, while the growth of consumerism (whether the result of political or religious stimuli, or increasing population) was well-illustrated, statements regarding modes of pottery production were, with the exception of Staffordshire, based on analysis of the technological aspects and frequency of sherds found on occupation sites. In many ways, therefore, the above papers raised as many questions on the organisation of pottery production as they answered.

The 12th to 16th centuries

Papers concerned with this period are grouped below under: architectural ceramics; the diffusion of technological advances from the Islamic world through the Iberian Peninsula to the rest of Europe; finds from more distant consumer sites.

Architectural Ceramics. Two papers considered floor tiles. The first of these presented a regional survey of tile production and distribution in the north-east of England (mainly Yorkshire) from the 13th century (Stopford: C3c*), demonstrating, with numerous examples, their concentration on religious sites. The 14th-century decline and 15th-century revival were also discussed within the context of supply and demand. The second paper painted a broader geographical and chronological picture (Norton: C4c*), illustrating some of the influences (notably royal and ecclesiastical patronage and travelling craftsmen) governing the geographical distribution of tiled floors and the development of the decorative techniques across Europe from the 12th century onwards. New information on floor tiles was

also presented in some of the following papers.

A third paper presented the results of recent research into the dating, production techniques (including clay sources, dimensions, firing and decorative traits) and constructional use of late 12th- to 14th-century bricks in Tuscany (Parenti: C4d*). It was shown that, after a long lapse, brick production was revived in the late 12th century; the dimensions, which are different to those of Roman bricks, were standardised in the 13th century. At Siena, seven chronological groups of brick size have been defined between 1240 and 1690. The decoration used to embellish arched openings was initially achieved by carving fired bricks, but from the first half of the 14th-century moulds were used.

A fourth study, also Italian, concerned bacini, the traded pottery basins used as decorative architectural features (Berti and Gelichi: E4c*). This correlated finds from archaeological sites with those from standing buildings to build a tabulated chronological and geographical analysis of these vessels, which were imported from Western Islam, Eastern Islam and the Byzantine areas during the 10th to 13th centuries (divided into three periods). The key centres where such finds occur are in Tuscany (Pisa) and Liguria (Genoa) and, to a lesser extent, Lombardy.

Technology and trade. Pottery production in Spain was discussed by Gerrard and Guttiérez (C6a*) who gave an overview and reappraisal of the development of lustrewares and tin-glazed wares; this combined documentary evidence with new archaeological and scientific data from production centres Aragon, Andalucía, Murcia, Valencia, Catalonia, the Ballearics and Castile.

The results of an extensive British Museum research programme of provenance studies on Spanish ceramics were summarised by Hughes (C6c*). Petrological, neutron activation and statistical analyses of samples from Andalucía, Valencia, Barcelona and finds from outside Spain (notably Sardinia and in England) has shown clear chemical differentiation between the products of centres such as Seville, Barcelona and Granada and those of Malaga and Valencia. NAA has shown a complex range of chemical composition sub-groups within the output of the latter two centres, and that the interpretation of these wares must encompass their art-historical aspects.

The distribution of traded Spanish ceramics was outlined in a chronological survey of the broad Spanish ware groups most commonly found in North-west Europe (Hurst: C6b*); this covered both finewares, and Spanish and Portuguese coarsewares. Of relevance to the mechanisms of distribution were the following discussions of shipwrecks and their cargoes. Two of these were medieval wrecks in Catalonia (Palou i Miquel et al: B3c*). The first, Culip VI, contained pottery from Malaga and Granada dated to c.1350-1400, which formed part of the cargo, with a lesser amount of pottery from Languedoc and Provence, thought to have been used by the crew; the latter suggested that the ship was heading for the French coast or to Italy (Genoa or Liguria). The second wreck, Sorres X, contained a range of kitchen wares, and the remains of ten earthenware jars with potters' marks which had been wrapped in esparto matting. These were used for transporting fish products, and suggest that the ship was engaged in coastal traffic between the market of Barcelona and its economic and productive hinterland.

The wreck of 15th-century ship of Aragon, sailing from Valencia, which sank c. 1440 off Sardinia, en route for Sicily was also described (Martin-Bueno: B3e*). The pottery comprised not only table and kitchenwares, but also a consignment of tiles, the heraldic decoration on which indicates that they were destined for the castle in Palermo of the Becadelli family, who were in the service of the King of Aragon in Sicily.

The Islamic influence on pottery and tiles in southern and western Europe was discussed in a general paper by Blake (C8d#), while an example of direct Islamic and Spanish

influences on pottery production outside Spain was given in a paper on the fascinating 13th- to 14th-century production site at Marseilles, known as the 'Olliers' (Marchesi et al: C8e*). The first full investigation of a potter's workshop complex in the south of France, this has revealed a number of unique features. The kilns are of a type hitherto unknown in Provence, being of circular construction with a central pillar and radiating arches; one has kiln bars, the northernmost example of an Islamic type known in Spain and around the Mediterranean. Smaller kilns were also found, thought to have been used in glaze manufacture. The range of wares and forms was discussed in terms of petrology, dating and stylistic affinities; many are reminiscent of Islamic and Mediterranean types but are the first known in Provence. Tin-glazed tiles, both monochrome and polychrome, were also produced; these include the earliest known examples in north-west Europe, and later types different from any known in the region, perhaps the result of aristocratic patronage. The question of the technological and stylistic development in southern Europe was discussed and it was suggested that the potters came from southern Spain or from the Siculo-Maghrebi area.

The theme of tin-glazing in north-western Europe was followed through in a summary of the documentary, iconographic and archaeological evidence for the use and development of tin-glazed wares in Flanders (Hillewaert: C6d*). This showed a limited use of tin-glazed floor-tiles in the late 13th century and some local production in the 14th-century (wasters from Utrecht). Large scale production of tin-glazed pottery and tiles only started in the late 15th/early 16th century; these wares include new types which imitate Spanish and German forms. Wasters have been found in Antwerp and Utrecht, but no kiln sites are known. The factors prompting, and questions regarding, technological innovation and the relationship between potters, tilers and artists were considered, and the need for a programme of scientific analyses of finds from possible production centres was stressed as essential for resolving problems of provenance and chronology.

More distant sites. The influence of European technology and fashion on production in Hungary was demonstrated in a discussion of a Renaissance stove-tile from the Kinizsi Castle at Nagyvázsony, which was produced in a local clay using a German mould (Tamasi: E4b*). The tile, which has an allegory of Temperance was discussed within its chronological and arthistorical context.

For Iceland, pottery offers one of the best forms of evidence for trade. Pottery studies here are relatively new, but it was shown that the although medieval sherds are sparse (Grimston and possibly French wares), 14th and 15th centuries wares are more common (Sveinbjarnardottir: E5e*). Post-medieval types comprise German stonewares, Saintonge, Martincamp, Jutish wares and most commonly, redwares (Dutch, German or Danish). All probably reached Iceland via Norway, which was listed in the programme (Molaug: E3c) but not discussed; work in Trondheim, however, has been reviewed in *Medieval Geramics* 15.

Finally, there was a stimulating general paper on social mechanisms (patronage, special commissions, gift exchange and the acquisition of souvenirs) which interacted with crosschannel trade during the late 15th and early 16th centuries (Gaimster: E4d#). Iconographic and archaeological evidence from a range of consumer sites was used to demonstrate the functional and socio-economic significance of imports such as stove-tiles, tin-glazed wares and stonewares, which were interpreted as status symbols aimed at the luxury, rather than the mass market.

Presentation

A few points remain to be made regarding the presentation of the conference, both at York and in this volume. Firstly, while an effort has been made to present a comprehensive overview, the complex organisation of the programme made it impossible to attend every presentation, and the above incorporates the content of pre-printed papers. It should be stressed, however, that these are condensed papers or extended abstracts rather full transcripts. Alk include the author's contact address, but not all have bibliographies. These texts were published as received from the author, with no preliminary editing to ensure a common standard of typeface, terminology, abbreviations, bibliographical referencing etc., and no proof-reading stage to allow contributors to check their work. The Abstracts were retyped to a common format, and on the whole are reliable, but the entries were not checked by the original authors and factual erors do occur, notably the startling statement that the first medieval Spanish wares reached north-west Europe in the 13th and 14th centuries from Australia. Exciting as this new trade route may sound, it was clear from the paper that Andalucía was meant, and that this is one of the few typographic errors spotted in this wealth of literature.

While the pre-printed papers should be available in university and unit libraries, readers should note that they can no longer be ordered. It had been planned to publish full proceedings of the different sessions, but financial constraints now make this unlikely. It is possible, however, that certain groups of papers (such as the Spanish contributions) will be published independently. For this reason, this review, although undoubtedly failing to include every mention of ceramics or do justice to the papers listed, is more detailed than would normally have been the case.

BIBLIOGRAPHY

Nb. The following only lists those papers included in the Pre-Printed Papers. The full volume titles are listed below. For economy, the abbreviation 'Vol. x' refers back to these titles.

Maritime Studies — Ports and Ships. Medieval Europe 1992, Pre-Printed Papers Volume 2.

Technology and Innovation. Medieval Europe 1992, Pre-Printed Papers Volume 3.

Exchange and Trade. Medieval Europe 1992, Pre-Printed Papers Volume 5.

Berti, G. and Gelichi, S. 1992, 'Mediterranean ceramics in late medieval Italy', Vol. 5, 119-23 (incl. table and fig).

Ford, D. 1992, 'Stafford Ware to Cistercian Ware: pottery production and distribution in Staffordshire from the 9th to 15th centuries', Vol. 5, 105-111.

- Gerrard, C. and Gutiérrez, A. 1992, 'Lustreware and tinglazed pottery from Spain: an overview of its origin and development', Vol. 3, 145-150.
- Gutiérrez Lloret, S. 1992, 'Production and trade of local and regional pottery in Early Medieval Spain (7th-9th centuries): the experience of the south-east of the Iberian Peninsula', Vol. 3, 77-91 (incl. 4 figs; extensive bib).
- Hillewaert, B. 1992, 'The introduction of tin-glazing in north-
- western Europe', Vol. 3, 163-68 (incl. 2 figs). **Hollevoet, Y.** 1992, 'Early-medieval hand-made pottery from settlement sites in coastal Flanders (Belgium)', Vol. 3, 217-22 (incl. 2 figs).
- Hughes, M. J. 1992, 'Application of scientific analytical methods to Spanish medieval ceramics', Vol. 3, 157-62 (incl. 2 figs).
- Hurst, J. 1992, 'Spanish pottery imported into north-west Europe', Vol. 3, 151-155.
- Mainman, A. 1992, 'Pottery production in the late Anglo-Saxon period a case study', Vol. 3, 205-10 (incl. 2 figs).
- Marchesi, H., Thiriot, J. and Vallauri, L. 1992, 'The quarter of the Olliers in thirteenth century Marseilles: a
- transfer of technology', Vol. 3, 193-99 (incl. 2 figs). **Martin-Bueno, M.** 1992, 'A 15th-century Aragonese ship in
- Sardinian waters', Vol. 2, 55-60.

 Meyer-Rodrigues, N. 1992, 'Les poteries à glaçure primitive dećouvertes à Saint-Denis', Vol. 3, 211-16 (incl. 2 figs).
- Norton, C. 1992, 'The spread of medieval floor tiles in Europe', Vol. 3, 73-8.
- Palou i Miquel, H., Pujol i Hamelink, M., Raurich i Santalo, X and Rieth, E. 1992, 'Two medieval shipwrecks in Catalonia: Culip VI and Sorres X', Vol. 2, 29-34 (incl. 5 figs).
- Parenti, R. 1992, 'Medieval bricks in Tuscany: use, size, bonding and decoration', Vol. 3, 79-84.
- Stopford J. 1992 'Technology, organisation, perception: ingredients of economic change' Vol. 3, 55-60.
- Sveinbjarnardottir, G. 1992, 'Contact between Iceland and the European continent in the medieval period: the archaeological evidence', Vol. 5, 153-58 (incl. 1 fig).
- Tamási, J. 1992, 'A Renaissance stove tile with an allegory of Temperance from the Kinizsi Castle at Nagyvázsony and other stove tiles from the Rhineland in Hungary', Vol. 5, 113-117.
- Verhoeven, A. A. A. 1992, 'Economic development and ceramic exchange in the Southern Netherlands (AD 700-1250)', Vol. 5, 93-97 (incl. 4 figs).
- Wooding, J. M. 1992, 'Gaulish artefacts in the Celtic West: some problems of approach', Vol. 5, 169-74.

Lyn Blackmore Museum of London

