

Bernd Liesen

EARLY IMPERIAL HANDMADE SOUTH GAULISH POTTERY FROM LOWER GERMANY

With a contribution by Malgorzata Daszkiewicz and Gerwulf Schneider

Introduction

Excavations in Lower Germany have unearthed a small group of early Imperial, handmade pots of South Gaulish origin (types Haltern 94/95; Gellep 449 and Hofheim 122; Tongeren 109; Deru P59)¹. In Southern Gaul most of those forms occur both as wheelmade and handmade versions. Many of the handmade vessels show traces of additional treatment on a slow-turning wheel. This article aims to describe the type range and the fabrics of this group. Some aspects of their import into Germany are also discussed here.

Typology

According to the rim-forms two types can be distinguished.

1) Pot with carinated shoulder and low rim

Carinated shoulder and low, everted rim. The shoulder often turns, frequently there is a ridge on the exterior shoulder. This type has been subdivided into four variants:

- a) On Haltern 94 (**figs. 1,1a; 2,1–2**) the rim and shoulder are polished, the surface of the body shows no signs of tooling². Flat base.

- b) The rim and shoulder are polished, vertical polished lines on the wall (**fig. 1,1b**).
- c) Haltern 95 (**fig. 1,1c**) is almost identical, but has two small lugs below the shoulder. Flat base.
- d) The rim and shoulder are polished, there are vertical or slightly diagonal ribs on the wall. Ring foot (**figs. 1,1d; 2,3**).

2) Pot with ridged shoulder

The rim and shoulder of Hofheim 122/Tongeren 109/Deru P59/Gellep 449 (**figs. 1,5; 2,4–5**) are polished; on the shoulder is a ridge. This type is always decorated with vertical ribs and has a ring foot.

Chemical and mineralogical composition

(by Malgorzata Daszkiewicz and Gerwulf Schneider)

Two samples of type 1a (T936, T938) and two of type 2 (T873, T937) have been analysed by WD-XRF (**table 1**). Sample T936, T937 and T938 are very similar to each other, T873 is slightly different. The lower values of some elements in this latter sample may be connected with the higher silica content, but the very different ratios of sodium to potassium (Na/K) and of strontium to calcium (Sr/Ca) make the difference significant. The elevated content of Zinc (Zn) in sample T873 very probably is a secondary effect as are the elevated values of phosphorus (P₂O₅) and barium (Ba) in all four samples. The analyses do not match any of the analysed Roman pottery from the Rhineland in our databank³. We also did not find any match with our limited number of analyses of pottery from Lyon and the Rhone valley, e.g. from Saint-Romain-en-Gal⁴.

Thin-sections studies of three samples (T936, T937, T938) point to their provenance from a region with acid plutonic rocks (**fig. 3**). This again rules out a provenance from the lower Rhine valley. The coarse inclusions, very probably representing added temper, consist mainly of rock fragments with quartz, K-feldspar and plagioclase, and more biotite than muscovite.

¹ LOESCHKE 1909, 302–303 pl. 25,1.3; RITTERLING 1912, 351 pl. 37,122; VANVINCKENROYE 1991, 32–33 pl. 12,109; DERU 1996, 133. – Apparently the sources of those vessels have so far remained undetermined; cf. WEBER 1993, 30 („germanisch“ according to v. Uslar). DERU 1996, 133 and PIRLING/SIEPEN 2006, 186 allocated pots with ridged shoulder and vertical ribbing (Type 2) as terra nigra, a technique in which similar forms were produced. Only a few of the vessels mentioned in this study could be personally examined. Wheel-made pots with carinated shoulder and low rim were in use in Gaul, Rhaetia and Germania. Some vessels from Lower Germany can be attributed to Southern Gaul, cf. LIESEN 2004a, 467 fig. 3,8 (this vessel was falsely designated as handmade). – LIESEN 2004b, 738 fig. 50,1–2. – Archäologischer Park Xanten, find no. C 21690 (pers. comm. A. Willmitzer). Pots with carinated shoulder and low rim were produced in the 1st century workshops at Xanten (LIESEN 1994, pl. 9,14–18), Neuss (FILTZINGER 1972, pl. 62,1–8) and Cologne (HÖPKEN 2005, pl. 45,08–145); the surface treatment of the Neuss vessels resembles the South Gaulish manner. – We would like to thank A. Willmitzer (Bamberg) for information concerning finds from Xanten, R. Niemeijer (Nijmegen) for finds from Nijmegen, St. Berke (Trier) and B. Tremmel (Münster) for finds from Haltern and Anreppen, V. Jauch (Zürich) and D. Schmid (Augsburg) for finds from Switzerland, C. Höpken (Köln) for information concerning contents of pots, and C. Bridger-Kraus (Xanten) for correcting the English text.

² CHAUSSERIE-LAPRÉE/NIN 2004, 142–143.

³ There is no need to discuss this in detail; cf. SCHNEIDER 2001; BIEGERT ET AL. 2002 (with further references).

⁴ SCHNEIDER/DASZKIEWICZ 2006.

Lab.-no.	T936	T938	T873	T937
Inv.-no.	RMX 91,11.026	APX C25655	APX C21705	APX C11810
Type	1a	1a	2	2
SiO ₂	62.33	61.95	65.61	62.84
TiO ₂	0.831	0.799	0.648	0.814
Al ₂ O ₃	21.99	21.64	19.84	20.66
Fe ₂ O ₃	6.30	5.46	4.90	5.61
MnO	0.043	0.033	0.031	0.032
MgO	1.06	1.24	0.98	1.31
CaO	1.27	1.59	1.21	1.96
Na ₂ O	1.07	1.30	1.55	1.02
K ₂ O	4.49	4.18	3.67	4.49
P ₂ O ₅	0.60	1.80	1.57	1.26
V	106	111	87	109
Cr	114	106	97	101
Ni	62	47	45	50
(Cu)	32	28	247	36
Zn	207	204	225	321
Rb	205	261	208	249
Sr	212	218	176	240
Y	31	30	33	28
Zr	279	231	193	298
Nb	18	17	14	18
Ba	1275	1017	816	1300
(La)	75	44	53	65
(Ce)	157	128	99	153
(Pb)	59	54	40	53
(Th)	41	41	26	43
l.o.i.	4.19	2.05	1.42	5.20
total	100.03	100.19	100.06	99.96

Table 1. Chemical composition analysed by WD-XRF of samples ignited at 900°C (l.o.i. = loss on ignition).

Distribution

The distribution of this group in Lower Germany is limited to military sites, as well as associated settlements and cemeteries (fig. 4).

1) Pot with carinated shoulder and low rim.

- a) Haltern 94: Xanten, Cologne, Haltern and Anreppen⁵; further examples are recorded from sites in Northern Gaul and Upper Germany⁶.

- b) Pot with polished decoration: Cologne⁷.

- c) Haltern 95: Haltern⁸.

- d) Pot with ribbed decoration: Xanten and Cologne⁹; further vessels from sites in Upper Germany have been noted¹⁰. Some rim fragments cannot be attributed to a subtype¹¹.

2) Pot with ridged shoulder.

- Nijmegen, Xanten, Neuss and Cologne¹²; further examples are recorded from sites in Northern Gaul and Upper Germany¹³.

⁵ Xanten: HEIMBERG 1987, 447; 445 fig. 13,15; WEBER 1993, 148–149 no. BE 88; pl. 14, BE88 (gravel-pit Xanten-Wardt) (sample no. T936); JOACHIM 1999, 183; 184 fig. 4,11 (sample no. T938); Archäologischer Park Xanten, find nos. C 21353, C 21383 (pers. comm. A. Willmitzer), C 39092 (*Colonia Ulpia Traiana*), unpublished. – Cologne: LIESEN 2004a, 467 fig. 3,6–7.9; 486. – Haltern: LOESCHKE 1909, 302; three sherds found in the cemetery presumably represent either Haltern 94 or Haltern 95: find nos. 1986.061; 1988.252/a7; 1988.253/a3. These sherds are not interpreted as grave goods; unpublished, pers. comm. S. Berke. – Anreppen: unpublished, pers. comm. B. Tremmel.

⁶ Trier: GOERTHER-POLASCHEK 1985, 281; pl. 1,8c. – *Vindonissa*: MEYER-FREULER 2003, 534; 535 pl. 7, Ke117–Ke118; 572; 573 pl. 26, Ke424; 588; 589 pl. 34, Ke549 (ibid. 301 n. 1682–1683 with further references from sites in Switzerland).

⁷ LIESEN 2004a, 467 fig. 3,2–4; 486.

⁸ LOESCHKE 1909, 302.

⁹ Xanten: HANEL 1995a, pl. 102, C1958–C1959; HANEL 1995b, 235 nos. C1958–C1959 (*Vetera I*); Archäologischer Park Xanten, find no. C 9140 (*Colonia Ulpia Traiana*), unpublished. – Cologne: FREMERSDORF 1927, 258 fig. 4; LIESEN 2004a, 467 fig. 3,1,5; 486.

¹⁰ Cf. FREMERSDORF 1927, 258 n. 7.

¹¹ LIESEN 2004b, 759; 760 fig. 99,5; KRÄMER 2012, 137; 136 fig. 45,415–25.

¹² Nijmegen: Castra 1990, find no. 3377, excavations Radboud University Nijmegen 1990, unpublished, pers. comm. R. Niemeijer. – Xanten: JOACHIM 1999, 184; 185 fig. 5,11–12 (fig. 5,11: sample no. T938); Archäologischer Park Xanten, find nos. C 7418 + C 7436, C 21705 (sample no. T873) (*Colonia Ulpia Traiana*), unpublished. – Krefeld-Gellep: PIRLING/SIEPEN 2000, 156 grave 5394 pl. 110,6; 140,3. – Neuss: FILTZINGER 1972 pl. 7,1. – Cologne: DOPPELFELD 1953, 117 nos. 128–129 pl. 9,128.

¹³ Tongeren: VANVINCKENROYE 1991, 32; 33 pl. 12,109. – Karden: NICKEL 1999, 122; 375 Fototaf. 20,86.92.29.363. – Hofheim: RITTERLING 1913,

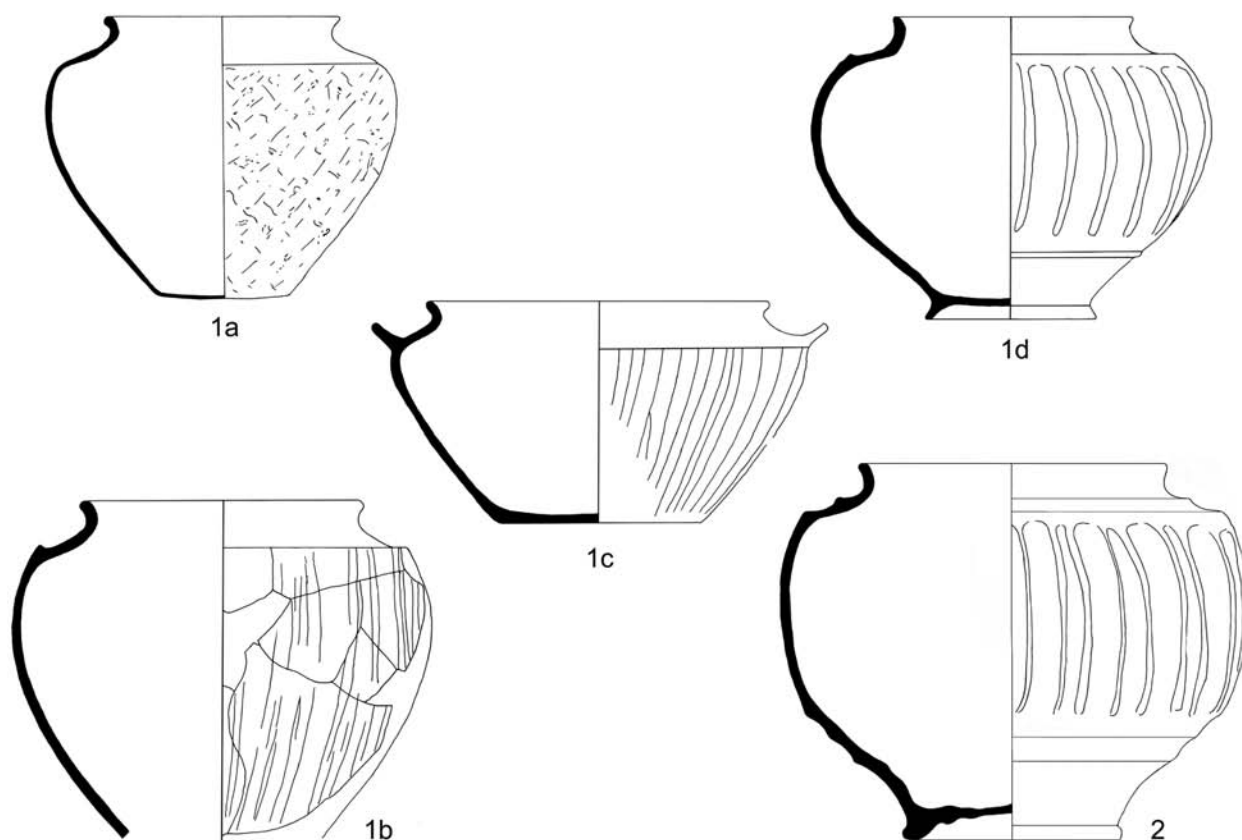


Fig. 1. Handmade South Gaulish Pottery from Lower Germany. Vessel types. Scale 1:3.



Fig. 2. Handmade South Gaulish Pottery from Lower Germany. 1–2: type 1a; 3: type 1d; 4–5: type 2.

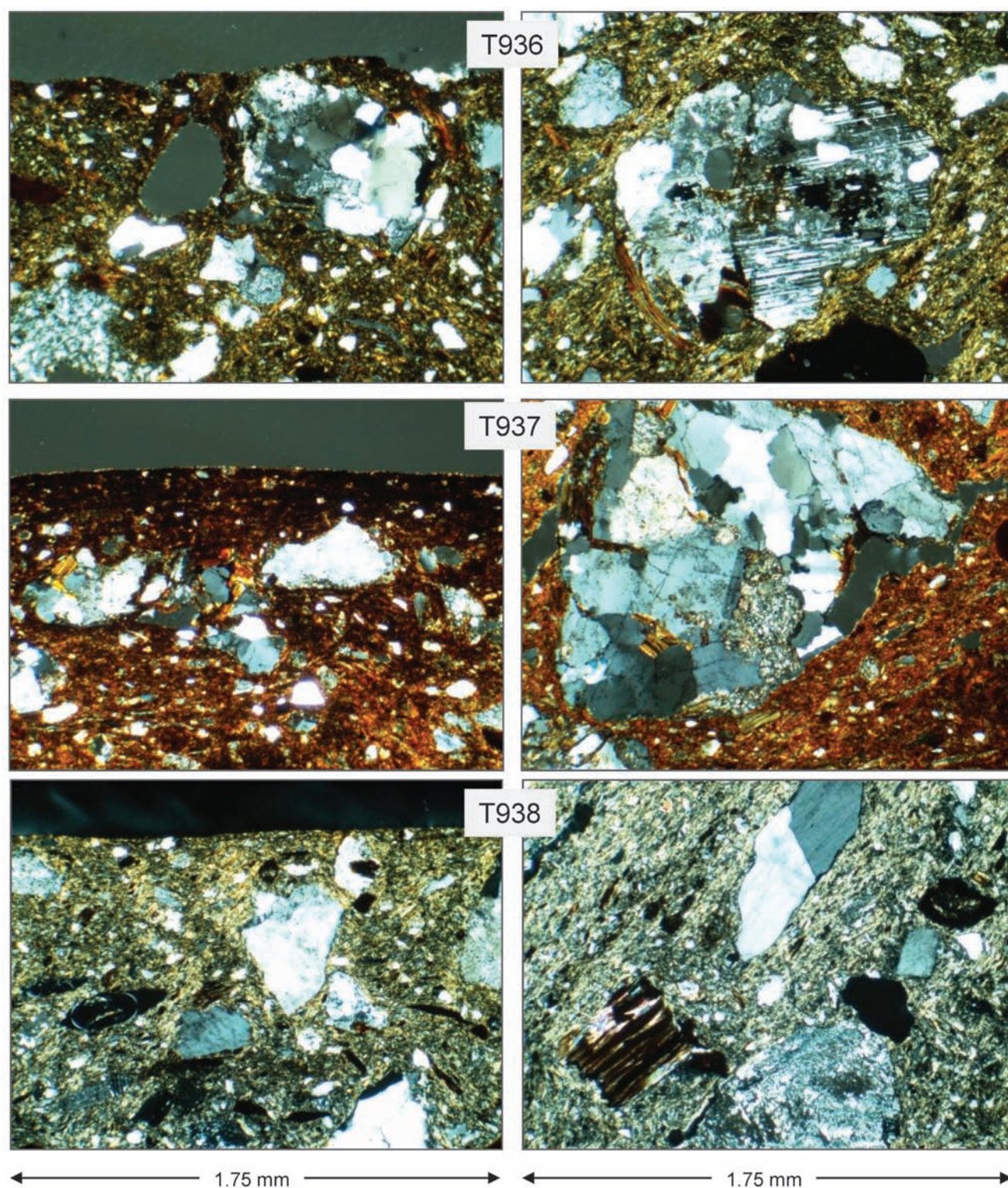


Fig. 3. Photomicrographs of thin-sections of samples T936, T937 and T938 (XPL).

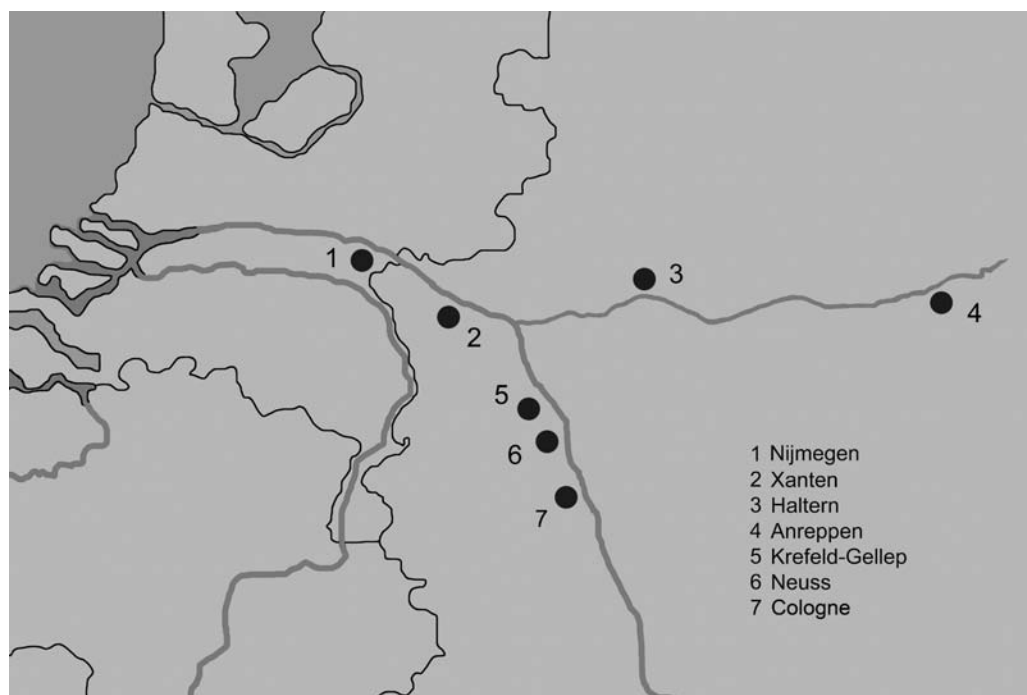


Fig. 4. Handmade South Gaulish Pottery from Lower Germany. Distribution.

Origin

The chemical and mineralogical composition of these vessels does not match reference data from pottery workshops in Lower Germany and Haltern. Forms and fabrics are those of vessels that appear to originate in Southern Gaul and the middle Rhone valley. But as shown above there is no match with the analyses of pottery from Lyon and the Rhone valley in the Berlin database. The provenance of the pots therefore cannot be determined precisely until further analyses are available for comparison.

1) Pot with carinated shoulder and low rim

- a) Haltern 94: Common in the Provence, less frequent in the coastal areas of Liguria¹⁴. The type was produced in Orgon near St. Rémy¹⁵, but there is strong evidence for other sources in that region¹⁶.
- b) Pot with polished decoration: Wheel-made pots with polished decoration were manufactured in Lyon, Saint-Romain-en-Gal und Aoste¹⁷; they are common in the Rhone valley and in the Provence¹⁸. Whether the handmade vessels of this type belong to those workshops

cannot be determined with certainty.

- c) Haltern 95 was found in Saint-Romain-en-Gal¹⁹. Handmade pots with carinated shoulder and small lugs were attributed to workshops in the Rhone valley²⁰. Wheel-made examples of this type were produced in Lyon, Saint-Romain-en-Gal and Aoste²¹.
- d) Pot with ribs: I do not know any parallels from Southern Gaul, but the fabric is very similar to that of type 2, so one can assume a South Gaulish origin.

2) Pot with ridged shoulder.

Wheel-made vessels of this type were produced in Aoste²². Whether the handmade vessels of this type belong to those workshops cannot be determined with certainty. Nevertheless, the content of mica clearly indicates a source in the middle Rhone valley.

Chronology

These pots follow a pre-Roman tradition. In Southern Gaul the forms described here are common from the 1st century BC to the 1st century AD²³.

The handmade South Gaulish pots are absent in the military fortress at Oberaden²⁴. Haltern 94 and Haltern 95 appear

351: „...Bruchstücke eines rötlichtonigen und eines grauen Gefäßes, die anscheinend ohne Anwendung der Drehscheibe, wohl in der Form, hergestellt sind“. Thus Hofheim type 122 represents both handmade and wheel-made pots. – Finds from sites in Switzerland: Kempraten: ACKERMANN in press cat. no. 411. – Oberwinterthur: excavation Lindbergstraße 14, no. 1997.051.279, unpublished, pers. comm. V. Jauch.

¹⁴ MARTY 2004, 99. – CHAUSSEURIE-LAPRÉE/NIN 2004, 143.

¹⁵ ARCELIN 1993, 251 (Orgon); 251 no. CNT-ALP 1a11; ARCELIN 2011, 15 fig. 3,f.

¹⁶ ROCHE 2009.

¹⁷ Lyon: THOLLON-POMMEROL/LAROCHE 1997, 68 pl. 18,6. – Saint-Romain-en-Gal: LEBLANC 1995, 257. – Aoste: LAROCHE 1987, 330 fig. 19,1.

¹⁸ CHAUSSEURIE-LAPRÉE/NIN 2004, 146 fig. 10–11; MARTY 2004, 104.

¹⁹ LEBLANC 2007, 171 fig. 147, H6n°51.

²⁰ MARTY 2004, 101 fig. 5,26.

²¹ Lyon: THOLLON-POMMEROL/LAROCHE 1997, 68 pl. 18,2. – Saint-Romain-en-Gal: LEBLANC 1995, 257. – Aoste: LAROCHE 1987, 332 pl. 20,2.

²² LAROCHE 1987, 329; 330 fig. 19,7.

²³ CHAUSSEURIE-LAPRÉE/NIN 2004, 146–148; LEBLANC 2007, 166–169 (Saint-Romain-en-Gal).

²⁴ For handmade pottery from Oberaden cf. LOESCHKE 1942, 135. The shape of Rödingen type 56 corresponds to our type 1, but has a different fabric; cf. SIMON 1976, 103.

for the first time at Haltern (and perhaps Anreppen), so it is likely that the pots with carinated shoulder were exported to Lower Germany from about 5 BC onwards. Pots with carinated shoulder and low rim appear in a deposit of the 3rd quarter of the 1st century AD in Cologne. The pots from *Vetera I* are pre-Flavian. The pots seem to have gone out of use by the Flavian period.

Conclusions

Although the number of South Gaulish handmade pots found in Lower Germany is low, one can assume that they were not personal belongings of individuals. They are early Imperial, long-distance exports to Germany, supplying the military camps on the Rhine and the Lippe²⁵. Several typological variants – as far as examined in this report – may originate from the same area. One sample showing a somewhat different

chemical composition may indicate a different workshop. Each of the typological variants are characteristic in shape and identifiable as containing products of the territory around. However, there is no clear evidence for the content of the pots so far. It is unlikely that they are just cooking pots.

Finally, we would like to point out that further research, starting from a much larger quantity of vessels, is an essential precondition for any sufficient appraisal of this pottery within the context of early Imperial commerce.

Bernd.Liesen@lvr.de
m.dasz@wp.pl
schnarch@zedat.fu-berlin.de

²⁵ Pots were identified as containers for honey, olives (ALBRECHT 1998; EHMIG 2006), berries (EHMIG 2009, 399; 434 no. 315), pigments (TUFFREAU-LIBRE/BARBET 1997, 402–403; EHMIG 2007, 244–245; 298 no. 188), and preserved meat and fish (DEFFRESSINGE 1986, 125 fig. 3,2; EBNÖTHER/MONNIER 2002, 170 fig. 172; DONAT ET AL. 2006; HÖPKEN 2009, 145; VAGINAY/GUICHARD 1988, 190); cf. TYERS 2001, 98–100.

List of figures

Fig. 1,1a,c Drawings L. Michels (Xanten) after LOESCHKE 1909 pl. 15,94–95. – **Fig. 1,1b** Drawing L. Michels (Xanten) after LIESEN 2004, 476 fig. 3,3. – **Fig. 1,1d** Drawing L. Michels (Xanten) after HANEL 1995a pl. 102, C 1958. – **Fig. 1,2** Drawing L. Michels (Xanten) after VANVINCKENROYE 1991, 33 pl. 12,109. – **Fig. 2** Photographs B. Liesen (Xanten). – **Fig. 3** Photomicrographs M. Daszkiewicz (Warsaw). – **Fig. 4** Drawing L. Michels (Xanten).

Bibliography

- ACKERMANN in press R. ACKERMANN, Der römische Vicus von Kempraten, Rapperswil-Jona. Neubetrachtungen anhand der Ausgrabungen Fluhstrasse 6–10 (2005–2006). Arch. Kanton St. Gallen 1 (in press).
- ALBRECHT 1998 P.-M. ALBRECHT, Note sur une lot de pots à provisions du III^e siècle après J.-C. contenant des olives du *picenum* découvert à Bliesbuck (Moselle). SFECAG Actes Congrès Istres 1998 (Marseille 1998) 321–327.
- ARCELIN 1993 P. ARCELIN, Céramique non tournée des ateliers des Alpilles. In: M. Py et al., DICO CER – Dictionnaire des Céramiques Antiques (VII^{ème} s. av.n.e. – VII^{ème} s. de n.e.) en Méditerranée nord-occidentale (Provence, Languedoc, Ampurdan). Lattara 6 (Lattes 1993) 248–256.
- ARCELIN 2011 Id., Céramiques non tournée des Alpilles au I^{er} siècle avant J.-C. Les ateliers B. SFECAG Actes Congrès Arles 2011 (Marseille 2011) 13–22.
- BIEGERT ET AL. 2002 S. BIEGERT ET AL., Keramik-Referenzgruppen römischer Töpfereien in Nieder- und Obergermanien. Berliner Beitr. Archäometrie 19, 2002, 5–29.
- CHAUSSERIE-LAPRÉE/NIN 2004 J. CHAUSSERIE-LAPRÉE/N. NIN, Les pots carénés en Provence occidentale (fin du I^{er} s. av. J.-C.-milieu du I^{er} s. apr. J.-C.): approche préliminaire. SFECAG Actes Congrès Vallauris 2004 (Marseille 2004) 139–149.
- DEFFRESSIGNE 1986 S. DEFFRESSIGNE, Découvertes de La Tène III à Avallon (Yonne). Rev. Arch. Est et Centre-Est 37, 1986, 122–129.
- DERU 1996 X. DERU, La céramique belge dans le nord de la Gaule. Publ. Hist. Art et Arch. Univ. Catholique Louvain 89 (Louvain-la-Neuve 1996).
- DESBAT ET AL. 1979 A. DESBAT ET AL., Note préliminaire sur la céramique commune de la rue des Farges à Lyon. Figlina 4, 1979, 1–17.
- DONAT ET AL. 2006 P. DONAT ET AL., Fleischkonserven als Produkte römischer Almwirtschaft. Schwarze Auerbergkeramik vom Monte Sorantri bei Raveo (Friaul-Julisch-Venetien, Nordost-Italien). Bayer. Vorgeschbl. 71, 2006, 209–232.
- DOPPELFELD 1953 O. DOPPELFELD, Hafenfunde vom Altermarkt in Köln. Bonner Jahrb. 153, 1953, 102–125.
- EBNÖTHER/MONNIER 2002 C. EBNÖTHER/J. MONNIER, Ländliche Besiedlung und Landwirtschaft. In: L. Flutsch et al., Die Römerzeit in der Schweiz. Die Schweiz vom Paläolithikum bis zum frühen Mittelalter 5 (Basel 2002) 135–177.
- EHMIG 2006 U. EHMIG, Die Oliven ins Töpfchen – Pinselaufschriften auf Töpfen in Mainz und dem Mainzer Umland und der Begriff *penurium* auf römischen Amphoren. In: Xantener Ber. 14 (Mainz 2006) 73–80.
- EHMIG 2007 EAD., Tituli picti auf Amphoren in Köln. Kölner Jahrb. 40, 2007, 215–322.
- EHMIG 2009 EAD., Tituli picti auf Amphoren in Köln II. Kölner Jahrb. 42, 2009, 393–445.
- FILTZINGER 1972 P. FILTZINGER, Die römische Keramik aus dem Militärbereich von Novaesium (etwa 25 bis 50 n. Chr.). Novaesium V. Limesforschungen 11 (Berlin 1972).
- FREMERSDORF 1927 F. FREMERSDORF, Gräber der einheimischen Bevölkerung in Köln. Prähist. Zeitschr. 18, 1927, 236–288.
- GODARD 1992 C. GODARD, Une réserve de céramiques de l'époque de Claude à Vienne (Isère). SFECAG Actes Congrès Tournai 1992 (Marseille 1992) 239–264.
- GOETHERT-POLASCHEK 1985 K. GOETHERT-POLASCHEK, Katalog der römischen Lampen des Rheinischen Landesmuseums Trier. Bildlampen und Sonderformen. Trierer Grab. u. Forsch. 15 (Mainz 1985).
- HANEL 1995a N. HANEL, Vetera I. Die Funde aus den römischen Lagern auf dem Fürstenberg bei Xanten. Text und Tafeln. Rhein. Ausgr. 35 (Köln 1995).
- HANEL 1995b Id., Vetera I. Die Funde aus den römischen Lagern auf dem Fürstenberg bei Xanten. Katalog. Rhein. Ausgr. 35 (Köln 1995).
- HÖPKEN 2005 C. HÖPKEN, Die römische Keramikproduktion in Köln. Kölner Forsch. 8 (Mainz 2005).
- HÖPKEN 2009 EAD., In Tongeren verpackt? Drei Transportgefäße aus dem Flottenlager Köln-Alteburg. In: H. van Enckevort (ed.), Roman Material Culture. Studies in honour of Jan Thijssen (Zwolle 2009) 143–147.
- JOACHIM 1999 H.-E. JOACHIM, Einheimische vorcoloniazeitliche Keramik aus dem Bereich der Colonia Ulpia Traiana (CUT) bei Xanten. In: Xantener Ber. 8 (Köln 1999) 173–199.
- KRÄMER 2012 J. KRÄMER, Die Befunde und Funde von Insula 15 in der Colonia Ulpia Traiana. In: Xantener Ber. 24 (Darmstadt/Mainz 2012) 57–197.
- LAROCHE 1987 C. LAROCHE, Aoste (Isère): un centre de production de céramiques (fin de 1^{er} siècle avant J.-C. – fin du 1^{er} siècle après J.-C.). Fouilles récentes (1983–1984). Rev. Arch. Narbonnaise 20, 1987, 281–348.
- LEBLANC 1995 O. LEBLANC, Notes sur des découvertes anciennes: Les productions de céramiques peintes à Saint-Romain-en-Gal (Rhône). SFECAG Actes Congrès Rouen 1995 (Marseille 1995) 251–261.
- LEBLANC 2007 Id., Les faciès des céramiques communes de la maison des dieux océan à Saint-Romain-en-Gal (Rhône) du I^{er} siècle avant J.-C. au III^e siècle après J.-C. SFECAG Suppl. 3 (Marseille 2007).
- LIESEN 1994 B. LIESEN, Töpfereischutt des 1. Jahrhunderts n. Chr. aus dem Bereich der Colonia Ulpia Traiana. Xantener Ber. 4 (Köln 1994).

- LIESEN 2004a Id., Römische Importkeramik in Köln – Eine Bestandsaufnahme. *Kölner Jahrb.* 37, 2004, 463–487.
- LIESEN 2004b Id., Die römischen Funde aus den Ausgrabungen an der Breite Straße in Köln. *Kölner Jahrb.* 37, 2004, 699–772.
- LOESCHCKE 1909 S. LOESCHCKE, Keramische Funde in Haltern. Ein Beitrag zur Geschichte der augusteischen Kultur in Deutschland. *Mitt. Altertumskomm. Westf.* 5, 1909, 101–322.
- LOESCHCKE 1942 Id., Die römische und belgische Keramik. In: C. Albrecht (ed.), *Das Römerlager in Oberaden und das Uferkastell in Beckinghausen an der Lippe*. Veröff. Städt. Mus. Vor- u. Frühgesch. Dortmund II,2 (Dortmund 1942) 7–148.
- MARTY 2004 F. MARTY, La vaisselle de cuisson du port antique de Fos (Bouches-du-Rhône). *SFECAG Actes Congrès Vallauris 2004* (Marseille 2004) 97–128.
- MEYER-FREULER 2003 C. MEYER-FREULER, Nicht nur Scherben – Analyse und Datierung der Keramik. In: A. Hagendorn et al., *Zur Frühzeit von Vindonissa*. Veröff. Ges. Pro Vindonissa 18 (Brugg 2003) 280–351.
- NICKEL 1999 C. NICKEL, Gaben an die Götter. Der gallo-römische Tempelbezirk von Karden (Kr. Cochem-Zell, D). *Arch. et Hist. Romaine* 3 (Montagnac 1999).
- PIRLING/SIEPEN 2000 R. PIRLING/M. SIEPEN, Das römisch-fränkische Gräberfeld von Krefeld-Gellep 1983–1988. *Germ. Denkm. Völkerwanderungszeit B* 18 (Stuttgart 2000).
- PIRLING/SIEPEN 2006 Id., Die Funde aus den römischen Gräbern von Krefeld-Gellep. *Germ. Denkmäler Völkerwanderungszeit B* 20 (Stuttgart 2006).
- RITTERLING 1913 E. RITTERLING, Das frührömische Lager bei Hofheim im Taunus. *Nass. Ann.* 40, 1913.
- ROCHE 2009 A. ROCHE, La céramique culinaire modelée à la fin du Ier s. av. J.-C. dans la chaîne des Alpilles (B.-du-Rh.): Productions et imitations, nouvelles données. In: C. Defrasne/T. Lachenal (dir.), *Cultures, Economies, Sociétés et Environnement du début de la Préhistoire au Moyen-Âge: travaux en cours*. Actes de la 4^e table ronde des jeunes chercheurs en archéologie de la MMSH, Aix-en-Provence, 15 mai 2009. <http://trjca.mms.h.univ-aix.fr/roche.htm>.
- SCHNEIDER 2001 G. SCHNEIDER, Materialanalytische Untersuchungen. In: B. Liesen, *Neues zur Produktion römischer Keramik in Xanten*. *Bonner Jahrb.* 201, 2001, 212–215.
- SCHNEIDER/DASZKIEWICZ 2006 Id./M. DASZKIEWICZ, Chemische Analysen zum Tafelgeschirr aus dem Militärlager von Dangstetten. In: K. Roth-Rubi, *Dangstetten III – Das Tafelgeschirr aus dem Militärlager von Dangstetten*. *Forsch. u. Ber. Vor- u. Frühgesch. Baden-Württemberg* 103 (Stuttgart 2006) 169–193.
- SIMON 1976 H.-G. SIMON, Die Funde aus den frühkaiserzeitlichen Lagern Rödgen, Friedberg und Bad Nauheim. In: *Römerlager Rödgen*. *Limesforschungen* 15 (Berlin 1976) 51–264.
- THOLLON-POMMEROL/LAROCHE 1997 C. THOLLON-POMMEROL/C. LAROCHE, L'atelier de Trion (place Cardinal-Gerlier). In: *Les productions de potiers antiques de Lyon: 2^e partie: Les ateliers du I^{er} siècle après J.-C.* *Gallia* 54, 1997, 63–68.
- TUFFREAU-LIBRE/BARBET 1997 M. TUFFREAU-LIBRE/A. BARBET, Les pots à couleurs dans l'antiquité romaine. *SFECAG Actes Congrès Mans 1997* (Marseille 1997) 399–405.
- TYERS 2001 P. TYERS, Camulodunum type 262. Central Gaulish coarse wares in Iron Age Britain. In: M. Tuffreau-Libre/A. Jacques (dir.), *La Céramique en Gaule et en Bretagne romaines: Commerce, Contacts et Romanisation*. *Nord-Ouest Arch.* 12 (Berck-sur-Mer 2001) 87–106.
- VAGINAY/GUICHARD 1988 M. VAGINAY/V. GUICHARD, L'habitat gaulois de Feurs (Loire). *Fouilles récentes*, 1978–1981. *Doc. Arch. Française* 14 (Paris 1988).
- VANVINCKENROYE 1991 W. VANVINCKENROYE, Gallo-Romeins aardewerk van Tongeren. *Publ. Prov. Gallo-Rom. Mus.* 44 (Hasselt 1991).
- WEBER 1993 C. WEBER, Jüngereisenzeitliche Keramik bis in die römische Kaiserzeit. In: H.-J. Schalles/C. Schreiter, *Geschichte aus dem Kies*. *Neue Funde aus dem Alten Rhein bei Xanten*. *Xantener Ber.* 3 (Köln 1993) 138–149.