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**THE TRANSMISSION OF TECHNICAL
KNOWLEDGE IN THE PRODUCTION OF ANCIENT
MEDITERRANEAN POTTERY**

Proceedings of the International Conference
at the Austrian Archaeological Institute at Athens
23rd–25th November 2012

OAI

Österreichisches Archäologisches Institut
Sonderschriften Band 54

Das Österreichische Archäologische Institut ist eine Forschungseinrichtung des Bundesministeriums für Wissenschaft und Forschung



Umschlagbild: Töpfer auf Siphnos (Foto K.-V. von Eickstedt)

Bibliografische Information der Deutschen Bibliothek

Die Deutsche Bibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <<http://dnb.ddb.de>> abrufbar.

Bibliographic information published by Die Deutsche Bibliothek

Die Deutsche Bibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at <<http://dnb.ddb.de>>

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ISSN 1998-8931

ISBN 978-3-900305-78-9

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Redaktion: Jennifer Palinkas, Eva Diana Breinfeld-von Eickstedt, Barbara Beck-Brandt

Umschlaggestaltung: Büro Pani; Andrea Sulzgruber

Satz und Layout: Andrea Sulzgruber

Gesamtherstellung: Holzhausen Druck GmbH

CONTENT

Introduction	7
<i>Walter Gauß – Gudrun Klebinder-Gauß – Constance von Rüden</i>	

SKILL AND LEARNING NETWORKS

Potting Skill and Learning Networks in Bronze Age Crete	17
<i>Ina Berg</i>	

Approaching Ancient Techniques. From Technology to Bodily Learning and Skill	35
<i>Constance von Rüden</i>	

MAKING POTS IN A transcultural PERSPECTIVE: THE IMPACT OF MOVING POTTERS ON THE TRANSMISSION OF TECHNICAL KNOWLEDGE

In the Footsteps of the Philistine Potters. Tracking the Dissemination of Technical Knowledge in the Production of Twelfth Century B.C. Aegean-Style Pottery to the Coastal Southern Levant	51
<i>Ann E. Killebrew</i>	

Mobility in the Bronze Age Aegean: The Case of Aeginetan Potters	63
<i>Bartłomiej Lis – Štěpán Růckl – Maria Choleva</i>	

An Aeginetan Potters' Workshop in Athens?	77
<i>Gudrun Klebinder-Gauß – Sara Strack</i>	

Winners, Losers, and Survivors of Roman Imperialism. A Case Study from the Northern Peloponnese	97
<i>Conor P. Trainor – Peter J. Stone</i>	

The Italo-Mycenaean Connection. Some Considerations on the Technological Transfer in the Field of Pottery Production	115
<i>Elisabetta Borgna – Sara T. Levi</i>	

Technological Innovations in Pottery. Examples from Celtic ›Princely‹ Sites (6 th to 5 th Century B.C.) in Continental Europe	139
<i>Ines Balzer</i>	

TECHNICAL CHANGE IN SOCIAL CONTEXT

The Spreading of the Potter's Wheel in the Ancient Mediterranean. A Social Context-Dependent Phenomenon	165
<i>Valentine Roux – Caroline Jeffra</i>	

Pottery Production during the Third and Second Millennium B.C. in Western Syria. The Development of Ceramic Technology as a Result of the Rise of Qatna as a Regional Capital	183
<i>Marco Iamoni</i>	

Ceramic Technology in Rapid Transition. The Evidence from Settlement Deposits of the Shaft Grave Era at Tsoungiza (Corinthia)	207
<i>Jeremy B. Rutter</i>	
Some Reflections on Ceramic Technology Transfer at Bronze Age Kastri on Kythera, Kolonna on Aegina, and Lerna in the Argolid	225
<i>Michael Lindblom – Walter Gauß – Evangelia Kiriatzi</i>	
Wheelmade Pottery and Socioeconomic Changes in Indigenous Mediterranean Gaul Societies during the Early Iron Age	239
<i>Anne-Marie Curé</i>	
Between Transfer and Interaction: Phoenician Pottery Technology on the Iberian Peninsula	257
<i>Dirk Paul Mielke</i>	
TECHNICAL CHOICES AS SOCIAL CHOICES	
Roads, Markets, Migrants. The Historical Trajectory of a Male Hausa Pottery Tradition in Southern Niger	277
<i>Olivier Gosselain</i>	
Production and Ceramic Technology at the Late Bronze Age Site of Alassa-Pano Mandilaris (Cyprus-Kouris Valley). First Things First: Understanding the Nature of the Raw Material(s) and Other Source(s)	297
<i>Ariane Jacobs – Christina Makarona – Karin Nys – Philippe Claeys</i>	
The Production and Distribution of Early Greek-Style Cooking Wares in Areas of Cultural Contact: The Case of Southern Italy and Sicily	311
<i>Alessandro Quercia</i>	
THE ART OF FIRING: KILN TECHNOLOGY AND FIRING PRACTISE	
Kiln Construction and Use in Greece. Communicating Technical Knowledge	333
<i>Ian Whitbread – David Dawson</i>	
A Closer Look at Updraft Pottery Kiln Constructions Based on Middle Helladic to Iron Age Examples in the Aegean	351
<i>Susanne Prillwitz – Anno Hein</i>	
Addresses of Contributors	367

GUDRUN KLEBINDER-GAUSS – SARA STRACK

AN AEGINETAN POTTERS' WORKSHOP IN ATHENS?

ABSTRACT

Throughout the 6th and the larger part of the 5th century B.C., Athenians were importing the majority of their cooking vessels from the island of Aegina, as attested by rich finds from the excavations in the Athenian Agora. Starting in the last quarter of the 5th century B.C., these imports were being replaced by locally produced pots, which in shape and technological style were equivalent to Aeginetan pottery. The fabric used for these ›Attico-Aeginetan‹ cooking pots can be distinguished from other Attic cooking fabrics used over the course of the Archaic and Classical periods.

This paper examines the transfer of shapes, ideas, and techniques from Aegina to Athens, set within the wider framework of political and economic processes at the time. An attempt is made to identify the potters of this new group of cooking vessels, to understand the mechanisms of communication, mobility, and knowledge acquisition underlying the transposition of Aeginetan techniques of cooking pot production to the city of Athens.

INTRODUCTION¹

The history of cooking pots and their use in Archaic and Classical Athens shows a number of interesting and perhaps unexpected traits. While during the Iron Age and the transition to the Archaic period, cooking vessels appear to have been locally produced and consumed, over the course of the Archaic period, imported cooking pots become ever more important. Following the first imports of Aeginetan-made cooking pots (*chytrai*) in the 7th century B.C., during the 6th century B.C. these *chytrai* become so common that imports outnumber locally produced cooking pots, and eventually bring their local production to a virtual end².

Towards the end of the 5th century B.C., a new type of cooking ware fabric is introduced in Athens. The fabric, as established both by macroscopic inspection and petrographic analysis, is clearly of Attic provenance. The shapes, types, and techniques employed, however, are equally clearly related to Aeginetan cooking pot production.

The appearance of Aeginetan cooking pots in Athens is by no means exceptional. While local production of domestic pottery has long been the default assumption, recent studies are increasingly demonstrating the extent to which these wares were moved³. The particular reasons for the

¹ We would like to thank John Camp, Jan Jordan, and Sylvie Dumont for permission to study the Agora material, and for the support *in situ*, as well as Jutta Stroszek and Eleni Banou for permission to study finds from the Kerameikos. We are grateful to Susan Rotroff for sharing with us her knowledge of Classical and Hellenistic Athenian cooking pots and her assessment of cooking pot provenance in these deposits. Sherry Fox kindly granted permission to study the sherds and thin-sections from Marie Farnsworth's collection kept at the Wiener Laboratory. Walter Gauß, Benjamin W. Millis, and Constance von Rügen contributed to many stimulating discussions of the material; finally, we acknowledge our gratitude to Hans Birk and Rudolfine Smetana for help with the images and to Benjamin Millis and Jennifer Palinkas for corrections of the English text. Responsibility for the contents, of course, rests with the authors alone.

² Rotroff 2015, 183 states that more than 70 % of cooking pots from among the inventoried material at the Agora dating between ca. 525 and 480 B.C. are Aeginetan imports, whereas locally made products amount to ca. 20 %.

³ See e.g., Spataro – Villing 2009, who study the distribution of Archaic and Classical *mortaria*; Gassner 2003, 220–225, for coarse ware imported at ancient Elea. Klebinder-Gauß 2012, 198 f., provides data for sites where imports of Aeginetan cooking wares have been identified. While Aeginetan cooking pots at the time of writing appear to represent the most widely, and most frequently, imported type of cooking ware in Archaic and Classical Greece and beyond, other export hits may be lurking in magazines; see for example Archaic-Classical cooking

Athenian preference of Aeginetan cooking pots over local – or indeed other foreign products – are however difficult to assess, and are probably manifold: style and fashion, the pots' performance characteristics, or cultural connotations may all have played a role⁴.

The emergence of the above-mentioned Attic Aeginetan-style cooking pot production in the late 5th century B.C., however, demands a rather more specific explanation. Drawing upon archaeological and ethnoarchaeological evidence, we will attempt to show that it is not an example simply of successful imitation. Rather, the transmission of a complete sequence of production steps speaks to the fact that, in this case, knowledge travelled in the shape of craftspeople experienced in its application, who deployed their long-acquired skills in a new setting. In this paper, we will argue that these new cooking pots were made by Aeginetan potters migrating to Athens, most likely in connection with the events surrounding the expulsion of Aegina's population by the Athenians in 431 B.C.

ARCHAEOLOGICAL CASE STUDY

The material forming the basis of this case study was excavated in the Agora and Kerameikos archaeological sites in Athens. The Agora, in particular, yielded numerous well deposits from the Archaic and Classical periods, the contents of which formed the basis for the landmark study of Athenian ceramics from the 6th through 4th centuries, »The Black and the Plain«, published by Brian Sparkes and Lucy Talcott in 1970⁵.

Contemporaneously with Sparkes and Talcott, Marie Farnsworth studied the mineralogical composition of Athenian pottery, including cooking wares, which she compared with raw materials and ceramic wares from sites such as Aegina and Corinth. Whereas Sparkes and Talcott concluded in their discussion of cooking ware fabrics that Attic and Aeginetan cooking wares could not be distinguished by macroscopic means alone, Farnsworth, based on analysis of thin-sections, demonstrated that imported Aeginetan cooking wares were nevertheless present among the Athenian finds studied by Sparkes and Talcott⁶.

The current authors' interest in Attic cooking wares arose from the conviction that a distinction of wares based on macroscopic study was possible after all. Our initial examination of cooking vessels published in »Agora 12« suggested that a significant number of the »common type« (i.e., globular, round-based, and one-handled) *chytrai* were made from a distinct, apparently non-Attic fabric. As a result of the intensive study of Aeginetan pottery over the last few years⁷, we could identify these pots and sherds with a very high degree of certainty as originating from the island of Aegina, and distinguish them from Attic products. Furthermore, our study revealed a striking chronological distribution of shapes, techniques, and fabrics within the cooking ware repertoire found at the Athenian Agora (fig. 1)⁸.

While we initially limited ourselves to an examination of items in Sparkes and Talcott's catalogue, we eventually expanded our study to include context materials with the aim to chal-

pots in Asia Minor and the Levant (e.g., Waldbaum – Magness 1997, 32 figs. 8, 9; Aydemir 2005, 88 fig. 205) and typologically similar finds from southern Italy and Sicily (Berlingò 2004/2005, fig. 14, 20 [left]; Orsi 1906, figs. 391, 481); to our knowledge, these finds have not yet been studied with the aim of establishing whether these similarities go beyond »mere« typology.

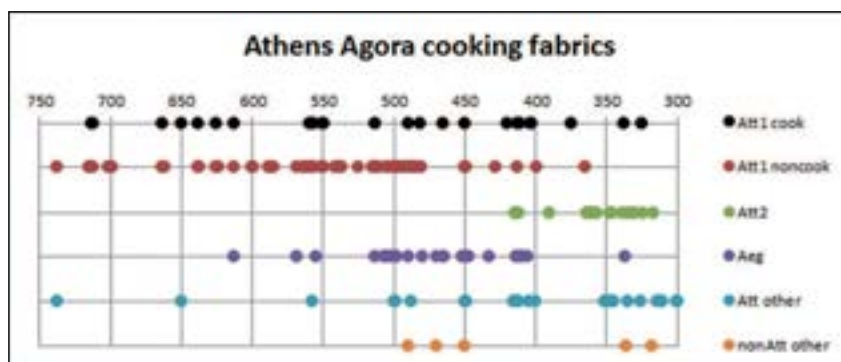
⁴ The bibliography on this topic is extensive; e.g., see recently Whitbread 2015; Vokaer 2010; Tite – Kilikoglou 2002.

⁵ Sparkes – Talcott 1970.

⁶ Farnsworth 1964.

⁷ Gauß – Kiriati 2011, esp. 47–49, 239 f.; Kiriati et al. 2011, 93–99; Klebinder-Gauß 2012, 87–90, 173–193; Pentedeka et al. 2012, 104–115.

⁸ Klebinder-Gauß – Strack (in preparation) for a macroscopic classification of the various cooking ware fabrics found at the Athenian Agora; see also below n. 12, 22, 27, 33.



- 1 Presence/absence of major cooking ware fabrics found at the Athenian Agora, between ca. 750 and 300 B.C. Graph is based on inventoried objects only, illustrating trends rather than actual quantities. Each dot represents a single object with its chronology; a midpoint within the chronological range was chosen for the purpose of illustration. Note that where several items have the same assigned date, the dates were spread around the midpoint to avoid coinciding dots. Att1 noncook represents water jars and a small range of other shapes made from Att1 fabric (Graph S. Strack)

lenge and refine hypotheses reached on the basis of items in »Agora 12«⁹. In particular, we reexamined deposits from the later 5th and early 4th centuries B.C. to clarify the emergence of the new ›Attico-Aeginetan‹ cooking ware, as well as the developments in Aeginetan cooking ware imports both during periods of heightened Attic-Aeginetan hostilities and Aeginetan exile and reestablishment on the island after 404 B.C.

Among the cooking ware fabrics identified at the Agora, three are of particular relevance for this case study: a coarse brown fabric of likely Aeginetan origin (Aeginetan cooking ware, or Aeg), a red micaceous fabric of presumably local origin (Attic micaceous ware, or Att1), and a somewhat finer, red fabric commonly coated with a colored clay-based wash, also presumed to be of local origin (Attic colored-wash ware, or Att2). Each of the fabrics corresponds to a particular set of shapes, as well as shaping and finishing techniques.

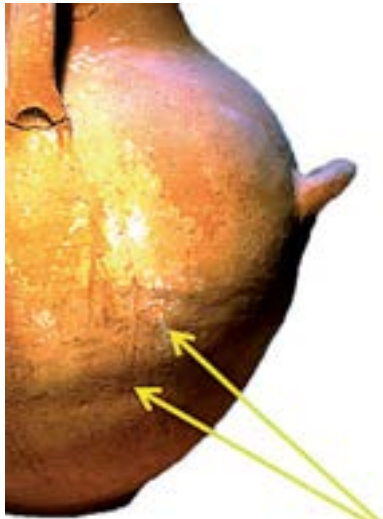
We observed a small degree of overlap between the clay recipes of individual fabrics of late 5th-century pots attributed to Att1 and Att2, which suggested the need to draw a distinction between *fabric* (specifically describing characteristics of clay and inclusions, or the fabric recipe) and *ware* (using typological, technological, and compositional data to define a group of vessels). The terms will be used accordingly below.

Att1¹⁰ represents the earlier of the two likely Attic fabrics, with examples of closely related fabrics dating from the 10th century B.C. onwards. Thus, the dominant Attic cooking ware fabric in the Iron Age is essentially the same as Att1, though notably coarser and less homogeneous. A comparatively thin-walled, slightly finer version of this ware – our Att1 – seems to first occur in deposits of the Protogeometric/Late Protogeometric period¹¹. Att1 is characterized by its

⁹ By necessity, the study of context material concerns only a fraction of the material available. Sparkes and Talcott included a list of over 400 deposits for the Archaic/Classical period; that list has, of course, grown since the publication of »Agora 12«. Moreover, much utilitarian pottery has been discarded after excavation. Consequently, the data collected are to be understood as statements of presence/absence, or rough approximations of quantities, rather than as quantitative analyses of pottery.

¹⁰ For a short description of this fabric, see Brann 1962, 29. We identified Farnsworth 1964, 226 nos. 4–6, there noted as Attic, as Att1 on the basis of macroscopic examination (see note 29). For a detailed macroscopic description of this fabric and of its technical characteristics see Klebinder-Gauß – Strack (in preparation). See also Klebinder-Gauß 2012, 100 f. sample no. CKOL94 and Pentedeka et al. 2012, 162–165 on the petrographic and chemical analysis of a vessel of this fabric from Aegina-Kolonna.

¹¹ E.g., Kübler 1943, 39 pl. 28 (Kerameikos Inv. 1090). A systematic study of Attic Iron Age cooking ware fabrics is in progress by S. Strack.



2 Att1 *hydria*, with probable coil joins visible at the lower body and with traces of the thin self-slip (Photo S. Strack)



3 Att1 water jar with fingermarks on the interior base (Photo S. Strack)



4 Att1 water jar with fingermarks from drawing out coils at the interior midbody (Photo S. Strack)

micaceous and grainy/sandy appearance. Until the late 7th/early 6th century B.C., the fabric was used for making flat-based cooking pots; beginning in the 6th century B.C., the shape range is dominated by water pots (jugs, *hydriai*, and amphoroid jars), in addition to a range of domestic shapes represented in much smaller quantities, while cooking pots and other shapes intended for use with fire are increasingly rare in this fabric¹² (fig. 1).

The pots are handmade, by superimposing thick coils of clay which were then drawn upwards and thinned, either by using fingers alone, or with the aid of a scraper-like tool on the interior while supporting the vessel wall with the hand on the exterior¹³ (figs. 2–5). We suggest the term ›coil-and-draw‹ to distinguish this technique from other types of coiling¹⁴. Traces of both ways of manipulating the

¹² For characteristic late 8th and 7th c. B.C.-examples of Att1, see Brann 1962, 54–56 pls. 11. 12 nos. 203–209 (cooking jugs); 195–202 (amphoroid jars, or *kadoi*); 213–216 (jugs); 218. 219 (*hydriai*). For examples from the 6th c. B.C. onwards, see Sparkes – Talcott 1970, 200–206 cat. 1589–1596 (*hydriai*). 1597–1607. 1609–1611 (*kadoi*); 1633–1656 (trefoil jugs); 1658–1661 (jugs); 1933. 1934 (cooking jugs). The less common shapes in the Archaic/Classical period include storage bins, *lekanai*, a cauldron-like shape, spouted bowls, a bowl-shaped cooking pot, *lopadia*, lids, a so-called cooking bell, a potstand, a barrel cooker or clay oven, portable hearths, as well as a standed bowl: see Sparkes – Talcott 1970, 343 no. 1525 pl. 66; 344 f. no. 1543 fig. 13 pl. 68; 359 nos. 1739–1741. 1744 figs. 17. 20 pl. 81; 372 no. 1942 pl. 94; 372 no. 1948 fig. 20; 373 no. 1959 pl. 95; 374 no. 1969 pl. 95; 374 nos. 1973. 1974 pls. 95; 374 nos. 1974. 1979. 1980 pl. 95; 377 no. 2022 pl. 97; 377 no. 2016 pl. 97; 377 no. 2023 fig. 19 pl. 97; 377 no. 2019 fig. 19 pl. 97; 378 no. 2026 fig. 19; 378 no. 2038 pl. 98. No particular pattern appears to arise from the dates of these rarer shapes; they may have been part of the potters' repertoire, but required in much smaller numbers than the cooking pots and water jugs, or alternatively may represent experiments and one-off productions. The exceptions are *lopadia* and lids which occur in slightly greater numbers in Att1, particularly in the last quarter of the 5th through the mid-4th c. B.C.

¹³ Sparkes – Talcott 1970, 35 postulated the bat-and-anvil technique for these vessels, where a rough out is beaten with a flat paddle while a curved anvil is held against the interior vessel wall. However, the angular, sharp edged indentations at the interior base of several Att1 water pots (among those the fragment published as an example for the use of the bat-and-anvil technique: Sparkes – Talcott 1970, pl. 99 a) might derive from scraper-like tools rather than from a curved anvil necessary to beat out a rounded shape.

¹⁴ Methods based on coiling differ, e.g., in the degree of deformation of the initial coil; thus, coils can be made to approximately the thickness of the finished walls, and joined to immediately form the shape of the vessel (e.g., Gosselain – Livingstone Smith 1995, 152 fig. 3, in modern-day Camer-



5 Att1 *hydria* with attached neck-rim section and finger marks from drawing out coils at the interior upper body (Photo S. Strack)



6 Aeg *chytra*, ca. first half 7th century B.C. (Photo G. Klebinder-Gauß)

coils – either with fingers or with a scraper – can be identified on individual pots, though not usually in combination on the same pot. The neck and shoulder of water pots were formed separately and attached to the preshaped body in a secondary stage of pot construction (fig. 5). Surfaces were then smoothed and wiped with wetted hands or rags, creating a thin self-slip, which tends to fire to a light brown color, in contrast to the reddish body color of the fabric (fig. 2).

The production of Aeginetan cooking wares of the historical period dates back to at least the first half of the 7th century B.C.; the absence of finds from securely dated deposits from earlier phases of the Iron Age obscures what may have been a potting tradition with a much longer history¹⁵. The fabric appears sandy and may be abrasive to the touch; the colors may be duller browns and grays in comparison to the reddish Attic fabrics, while flakes of biotite mica and lath-like, glossy black inclusions are the most distinctive macroscopic characteristics of this fabric.

The makers of Aeginetan cooking ware were working in a tradition evidently distinct from that of their Athenian counterparts¹⁶. Until the end of the 7th century B.C., Aeginetan cooking pots are handmade (fig. 6). On pots dating from the 6th century B.C. onwards, the presence of regular horizontal grooving on the neck and interior shoulder indicates the use of a rotational device in the manufacture of Aeginetan cooking pots (fig. 7), though it is unclear at this point whether the potters employed a fast-turning potter's wheel (>wheel thrown<), or a slower-speed

oon); alternatively, coils significantly thicker than the finished walls can be joined to be drawn up, thinned, or otherwise deformed, to obtain the final shape. The latter technique, which we envisage being used in ancient Athens, is practiced today (e.g., by Moroccan potters observed by Vossen 1990, 118 f. [»Wulst-Treibtechnik«], by potters in Cyprus visited by Hampe – Winter 1962, 73–79 pls. 42, 43, and by potters of storage vessels in the Gulf of Messinia, as documented by Giannopoulou 2010, 67, 99 Seq. 13–16).

¹⁵ Significant amounts of Middle to Late Protogeometric and Geometric pottery were identified at Kolonna in Aegina, though the material largely derives from burials or occurs as residual and stray finds in later deposits. No fragments of cooking ware can be securely associated with these early deposits (Jarosch-Reinholdt 2009, 15, 71), even though the reasonable assumption surely has to be that the Protogeometric and Geometric community at Kolonna also made cooking pots. See Klebinder-Gauß 2012, 173, on possible connections of Archaic and Late Bronze Age cooking pot production.

¹⁶ For the technical characteristics of Aeginetan cooking ware and detailed fabric description, see Klebinder-Gauß 2012, 178–182; Pentedeka et al. 2012, 104–115; and Klebinder-Gauß – Strack (in preparation).



7 Aeg jug, wheel ridges in the upper rim-neck part and scraping marks in the lower part (Photo G. Klebinder-Gauß)



8 Aeg jug, tool marks from scraping near base (Photo G. Klebinder-Gauß)



9 Aeg *chytra* with wheel marks on the interior base (Photo G. Klebinder-Gauß)



10 Aeg *eschara*, paring marks on the exterior (Photo S. Strack)

turntable (›wheel fashioned‹)¹⁷. The globular lower body and the shoulder-neck section of closed shapes usually appear to have been made as distinct parts that were subsequently joined, or the upper part was added to the lower one on a rotational device¹⁸. Being formed in two separate steps may have facilitated access to the interior during fashioning – the interior lower body bears distinctive overlapping oblique scrape marks all over (figs. 7–8), a process which we believe was used to obliterate any imperfections left from the shaping process, in addition to giving the vessel walls an even wall thickness throughout and also greater density by compressing the particles¹⁹. The thorough working of interior and exterior surfaces largely prevents any conclusions regarding the primary shaping technique. However, small-sized cooking pots with less easily accessible interiors appear to typically have been made in one piece: no interior scraping can be observed. Instead, spiral markings, from use of a rotational device, run all the way from the interior base to the rim (fig. 9)²⁰. We therefore suspect that the same primary forming technique was also used for larger pots.

The exterior surfaces may be pared (i.e., excess clay scraped or cut away with a bladed tool; fig. 10) or turned (scraping/cutting performed while rotating), though such treatment is more commonly observed on shapes other than cooking pots (e.g., *escharai*). Surfaces were then carefully burnished, with distinct, continuous parallel tool marks which on cooking pots run evenly from bottom to rim (figs. 6–11); the resulting surfaces are dense and often lustrous. Starting in the mid-5th century B.C., burnishing was gradually replaced by the application of a clay-based wash (fig. 12). This wash²¹ produces a dense surface, as well as brighter, more intense hues (red, orange, and black) in comparison to the uncoated surface.

Characteristic Aeginetan cooking ware shapes are cooking pots and utensils, such as globular *chytrai*, pans, *escharai*, and ovens²².

The second and later Attic fabric (Attic colored-wash²³ ware, or Att2) seems to originate from the same geological background as Att1, even though the finer texture and harder surface of Att2, as well as differences in composition, may suggest the use of different regional raw material sources and/or changes in the preparation of the clay mix and in firing temperatures (see below)²⁴.

¹⁷ Note that the differentiation between ›fast‹ and ›slow‹ rotational devices is not unproblematic; e.g., Eiteljorg 1980; Berg 2013, 116 f. The distinction of these techniques at one remove, i.e., on archaeological material, adds yet another layer of complication. Suffice it to say that the comparatively shallow horizontal grooving on regular-sized cooking pots may derive from finishing, rather than forming, stages on a rotational device; the deeper, continuous spiral grooves on miniature cooking pots, however, appear to be linked to the forming process. Examples of production techniques combining the use of a rotational device with hand-building elements: Courty – Roux 1995; Berg 2011; Choleva 2012.

¹⁸ For the use of the latter technique in the production of *pithoi* in Thrapsano, see e.g., Giannopoulou 2010, 71 f. 248 f. pls. 100–105.

¹⁹ For this kind of surface treatment and its characteristics, see e.g., Rice 1987, 137–138, 353 f.

²⁰ See also Klebinder-Gauß 2012, 179 pls. 100, 363; 113, 490.

²¹ The color of the wash used for coating Aeginetan cooking pots likely derives from naturally occurring metal oxides in the clay itself, not from an added colorant. The clay used for the wash may have been a clay selected specifically for color and fineness; however, levigation of the body clay to retain the fine clay fraction only would probably have sufficed to obtain the wash.

²² For the characteristic range of shapes of Aeginetan cooking ware, see Klebinder-Gauß 2012, 182–192. Aeginetan imports at the Athenian Agora are common type *chytrai*, lidded *chytrai*, *lopades*, lids, pans, as well as hearths, a cooking bell, ovens, a grill, and *escharai* (see Sparkes – Talcott 1970, 371 f. nos. 1922–1928. 1935 fig. 18 pl. 93; 372 f. nos. 1943–1945. 1947. 1949. 1951–1955 fig. 18 pl. 94; 373 f. nos. 1960. 1961. 1971 pl. 95; 374 nos. 1977. 1978 pl. 95; 375 nos. 1983–1985. 1987 fig. 17 pl. 96; 377 f. nos. 2017. 2018. 2021. 2027. 2028. 2030–2032 fig. 19 pls. 97–98).

²³ For this kind of wash see above for the Aeginetan cooking ware, or Aeg and n. 21.

²⁴ For a detailed macroscopic description of fabric Att2 and of its technical characteristics, see Klebinder-Gauß – Strack (in preparation). This fabric appears to largely coincide with the ›classical cooking fabric‹ as characterized in Rotroff 2006, 38 f.



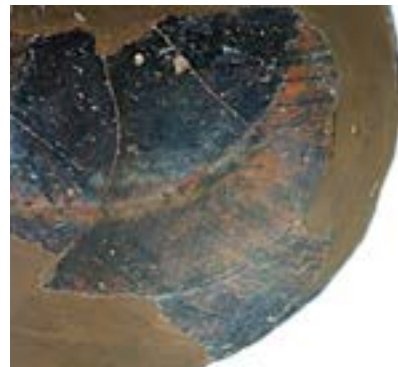
11 Aeg cooking pot with burnishing marks on the exterior surface (Photo G. Klebinder-Gauß)



12 Aeg *lopas* with wash on the interior surface, applied with a pencil (Photo G. Klebinder-Gauß)



13 Att2 *chytra*, interior surface with transition scraping to wheel ridging (Photo S. Strack)



14 Att2 lidded *chytra*, brush marks of wash (Photo S. Strack)

The shape range, as well as shaping and finishing techniques of this series of cooking pots, represents a break with previous Athenian traditions: the pots are now made using a rotational device, the interior body is scraped (fig. 13) or (on open shapes) smoothed, and exterior surfaces may be pared or turned. Similar to Aeginetan cooking ware, small versions of the globular *chytra* show no interior scraping and are made in one piece using a rotational device.

Exterior surfaces are often covered with a thin colored wash, which may be applied with a brush or sponge²⁵ (fig. 14). As with the later Aeginetan cooking ware, this wash produces a dense surface that displays more intense tones than the uncoated surface, resulting in clear differences in color at the transition from coated to uncoated surface, e.g., at the interior neck. Less frequently, exterior surfaces are burnished²⁶.

²⁵ A sponge for the application of the wash was used for example on the *chytra* Knigge 2005, nos. 309. 312 pl. 85.

²⁶ E.g., Athenian Kerameikos, Gesandtengrab: Knigge 1972, 603 no. 16 fig. 23, 4 (right); 24,4 (middle).



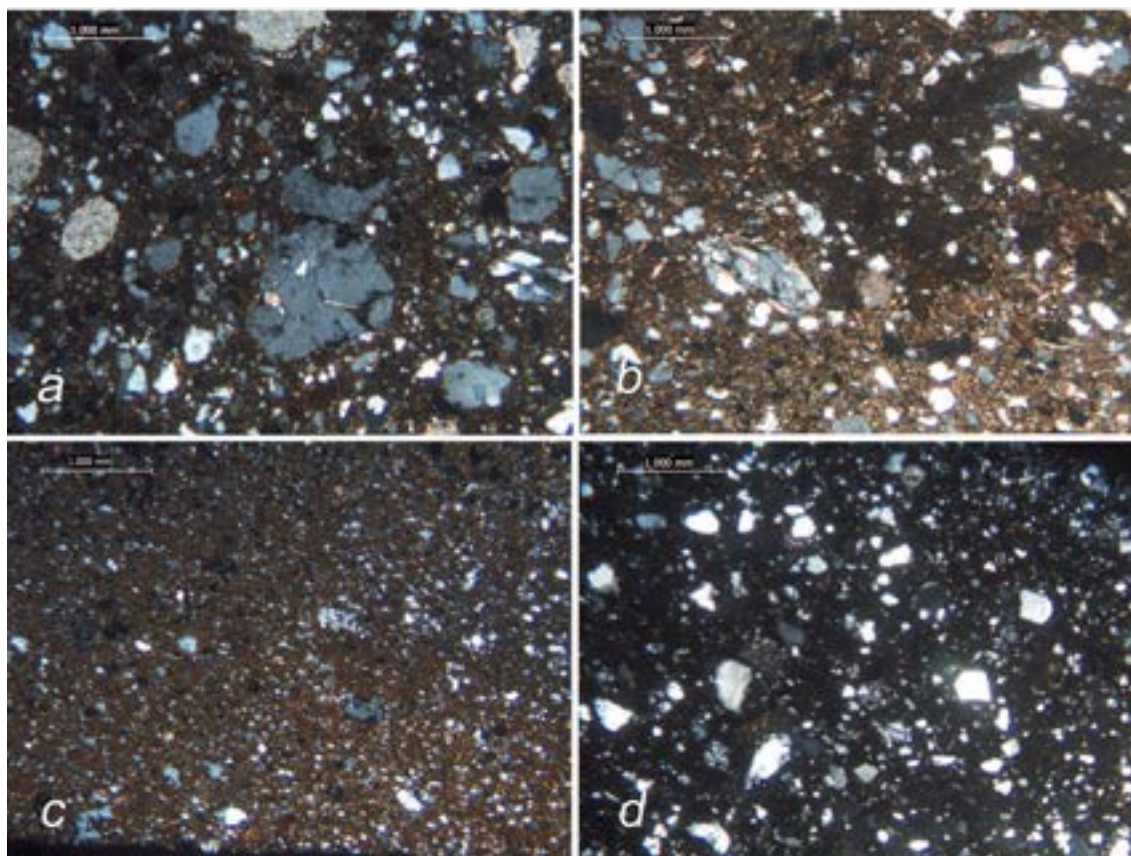
15 a–d Aeg and Att2 cooking ware ranges of the late 5th century B.C.: a. b. Aeginetan, 3rd quarter 5th century B.C.; c. d. Attic (Att2) 4th quarter 5th century B.C. (Photograph a: G. Klebinder-Gauß, b–d: Courtesy by American School of Classical Studies at Athens: Agora Excavations).

The predominant shapes are round-based *chytrai* and *lopades*, as well as *escharai* and pans²⁷. Unlike the earlier Att1 ware, Att2 is not used for water pots or other shapes not intended for use with fire.

The technical and stylistic characteristics of Att2 fabric have more in common with Aeginetan production than with the Attic micaceous cooking ware Att1. This similarity is evident from the use of the same manufacturing techniques: use of a type of rotational device, scraping of interior surfaces, and colored wash or (less frequently) burnishing, at exterior surfaces. In addition, a comparison of shape typology and morphology demonstrates the close connection between the Aeginetan and the Att2 ware traditions (fig. 15)²⁸. In fact, Att2 appears to be an immediate continuation of the Aeginetan production, differing only by the use of another fabric recipe.

²⁷ E.g., Athenian Agora: Sparkes – Talcott 1970, nos. 1929. 1931. 1932. 1936. 1938 pl. 93 (*chytrai* common type); nos. 1956 pl. 94 (lidded *chytra*); nos. 1962–1968. 1972 pl. 95 (*lopades*); no. 1975 pl. 95 (*lopadion*); no. 2024 pl. 97 (grill); no. 2033 (*eschara*); Kerameikos: Knigge 2005, nos. 311. 312 pl. 85 (*chytrai* common type); nos. 309. 310 pl. 85 (lidded *chytrai*); no. 317 pl. 85 (*lopas*); no. 375 pl. 92 (*eschara*); all last quarter 5th to 4th c. B.C. Less common shapes include a strainer (Knigge 2005, no. 2009 fig. 18 pl. 96) and a standed basin (Knigge 2005, no. 2034 pl. 98).

²⁸ Cf. Aeginetan products of the 3rd quarter of the 5th c. B.C. and Attic products of the 4th quarter of the 5th c., e.g., plain *chytrai* (Klebinder-Gauß 2012, 266 no. 368 pl. 100 and Sparkes – Talcott 1970, 371 no. 1929 pl. 93; here fig. 15 a. c), lidded *chytrai* (Sparkes – Talcott 1970, 373 no. 1955 pl. 94 and Knigge 2005, 151 no. 310 pl. 85), *lopades* (Sparkes – Talcott 1970, 373 f. nos. 1960 and 1966 pl. 95; here fig. 15 b. d), and portable hearths (Sparkes – Talcott 1970, 377 nos. 2018 and 2019 pl. 97).



16 Thin sections. a) Farnsworth Collection (FC) sample no. 2, Att1; b) FC 63, Att1; c) FC 22, Att2; d) FC 46b, Att2. Magnification 5 \times , scale bar 1 mm (Photo S. Strack)

A SIDE NOTE ON THE TWO MACROSCOPIC GROUPS ATT1 AND ATT2

An examination of ceramic samples and thin-section slides from Marie Farnsworth's research collection established that her sample set included examples of both Att1 and Att2 fabric²⁹. The geological background of the two wares appears similar, with muscovite mica, quartz (mono- and polycrystalline), quartzite, schist, altered (sericitized) feldspar, and micritic limestone as the dominant inclusions. As established macroscopically, the size range of inclusions in Att2 fabric is smaller than that of Att1 fabric³⁰; larger rock fragments, in particular fragments of quartzite and schistose rocks, are largely absent from Att2 samples (fig. 16). Neither of the two macroscopic groups is entirely homogeneous under the microscope. Optical activity of the clay matrix of Att2 samples is reduced in comparison to the Att1 samples. It is interesting to note that despite the fact that Att1 is handmade (whereas Att2 appears wheelmade), no clear pattern emerges regarding the orientation of particles in the respective samples, though this observation should not be overinterpreted.

²⁹ A number of slides and samples from Farnsworth's study collection are now curated by the Wiener Laboratory of the American School of Classical Studies in Athens, where they were studied by the present authors. Based on macroscopic examination of the sherds in Farnsworth's collection, we identified nine specimens of Att1 ware (sample nos. 1. 2. 44. 46a. 56. 60. 61. 63, as well as 25 which is a coarser version of the fabric, used for a *pithos*), and nine specimens of Att2 fabric (nos. 22. 27. 30. 46b. 46c. 48. 64. 65. 166). Farnsworth 1964 draws no distinction between Att1 and Att2 wares, nor is an example of the latter ware included in the catalogue accompanying her article.

³⁰ Att1: inclusion frequency ca. 25–35 %, poorly sorted; inclusion size mode 0.2–0.5 mm, inclusions range up to 1 mm and exceptionally to 2.5 mm. Att2: inclusion frequency ca. 20 %, poorly to moderately sorted; mode 0.1–0.2 mm, range to 0.5 and exceptionally to 1 mm.

The similarities between the micro-fabrics of Att1 and Att2 suggest that for both macro-groups, clays from similar geological backgrounds were being used. However, the reduced particle size and potentially also the rarity of rock fragments (schist, quartzite) in Att2 might suggest the selection of different regional raw material sources and/or changes to clay preparation which may eliminate larger inclusions (e.g., sieving, grinding). Decreased optical activity in Att2 samples might indicate a somewhat higher firing temperature (or longer soaking times) for this fabric³¹.

KNOWLEDGE ACQUISITION IN CRAFT PRODUCTION

Imitations, local versions, and hybrid reinventions of popular ›foreign‹ material culture are by no means archaeological news, and are in fact exceedingly well documented over wide stretches of time and space³². Given the ubiquity of this phenomenon, combined with the volume of Aeginetan cooking ware imports into Athens during the later 7th through the first three quarters of the 5th centuries B.C., it is perhaps surprising that Att1 ware potters did not establish a substantial production of local versions of Aeginetan cooking ware shapes. Particularly noticeable is the general absence of a local version of the globular *chytra*, the most common imported shape by far, but also of the *eschara*, a shape which seems to have reached Athens for the first time in the form of Aeginetan imports, and for which no local equivalent is known before the introduction of Att2.

There are, however, a few items which may be interpreted as attempts by Att1 ware potters to imitate Aeginetan globular *chytrai*. Three small-sized Att1 vessels, dating to the 6th and early 5th century B.C., depart from the traditional Attic ovoid, flat-based cooking pot type³³. They show approximately globular bodies, but while the bases are convex, an angle remains separating the base from the lower body (fig. 17). Fabric and manufacturing technique of these pots match that of other Att1 vessels. The small size of these *chytrai* seems significant; they are between 0.12 and 0.135 m in height, and thus small though functional versions of cooking pots. While cooking pots of this size are not unusual, the majority of contemporary imported *chytrai* are significantly larger; heights around 0.20 m are not uncommon, with exceptional examples approaching 0.30 m³⁴. The shaping of a small vessel, not exceeding the span of the human hand, can be easier to control than the shaping of a larger pot. Thus, small vessels may have been preferred for what might be experimental forays into making globular cooking pots. The same process can be observed in ethnographic studies where apprentices, when learning rough out operations, first try their hand on small vessels and only gradually move on to larger sizes³⁵.

If accepted as attempted imitations of Aeginetan models, these small *chytrai* give some insight into which characteristics may have been deemed important on the imported cooking pots. Thus, it is notable that the globular shape is replicated, whereas the very distinctive burishing is not. Furthermore, clay selection/preparation, shaping, and firing technique, as far as can be established with macroscopic means alone, are consistent with the Att1 tradition. It appears evident from these examples that Athenian potters were able to emulate some parts of Aeginetan technology, but not others. The globular shape of Aeginetan *chytrai* (fig. 18) could be approximated, though their dimensions, the evenness of their shape, and their true rounded base

³¹ Quinn 2013, 190–196.

³² See Burke 2009, 34–65, for a thoughtful discussion of the concept of hybridity. Regarding utilitarian wares, contacts with Greeks and Phoenicians appear to trigger the remodelling of local cooking pot repertoires, for example in Southern Italy, e.g., Quercia 2015 and this volume, and the southwest coast of France, Curé this volume.

³³ Sparkes – Talcott 1970, nos. 1933. 1934 pl. 93; Lynch 2011, 281 f. no. 185 fig. 144; see also Rotroff 2015, 184, for Sparkes – Talcott 1970, no. 1933. A fourth example, an even smaller pot with a height of 0.078 m from the early 5th c. B.C. (Sparkes – Talcott 1970, no. 1937), however, is an Att1 mirror image of small Aeginetan globular, round-bottomed *chytrai*, complete with one-piece wheelmade body. Might this be a product of an early Aeginetan immigrant? To date, this pot remains without parallels in Athens.

³⁴ E.g., Sparkes – Talcott 1970, no. 1922: height 0.284 m.

³⁵ E.g., Gosselain 2011, 215; Kamp 2001, 429–431. 447.



17 Att1 *chytra* with ›false‹ rounded base imitating Aeginetan globular *chytrai*. Agora P 32404, well J 2:4 (context ca. 525–480 B.C.); Lynch 2011, 281 no. 185 (Photo courtesy by American School of Classical Studies at Athens: Agora Excavations)



18 Aeg *chytra*, Aegina-Kolonna MA6560, well SHC4-05 (context ca. 480–470 B.C.; Photo G. Klebinder-Gauß)

could not be achieved with the shaping traditions of Attic micaceous ware. The Athenian potters of these re-creations clearly did not have the necessary information and personal knowledge of the shaping techniques used in Aegina – the knack of Aeginetan potters (their technological tradition or *habitus*) was a very specific one that could not be deciphered from only looking at their products.

This conclusion stands in stark contrast to the striking technological and stylistic similarities between the Attic colored-wash ware Att2 and Aeginetan cooking ware. What, then, had changed to allow potters working in Attica to emulate Aeginetan potting traditions?

Studies of human learning, both in anthropology/sociology and cognitive psychology, have stressed the importance of direct observation and personal interaction between teacher and student, in particular for the acquisition of practice-based knowledge (*savoir-faire*)³⁶. Certain elements of knowledge, such as embodied or tacit knowledge – body posture, gestures, and understanding of texture – do not need necessarily to be verbalized where there is direct contact, and indeed are often beyond the powers of verbalization; at the same time, demonstration, imitation, and repeated practice are indispensable for their acquisition³⁷.

Recognition of the importance of direct interaction for learning is by no means new. For example, Plato (rep. 5, 467a) asks »... Or have you never noticed the practice in the arts, how for example the sons of potters look on as helpers a long time before they put their hands to the clay?«³⁸.

³⁶ See for example Gosselain 2000, who distinguishes three categories that differ in the perceptibility of the technology used and in the degree of difficulty to adopt it. According to this classification, certain techniques cannot be adopted without additional information: for example shaping techniques that rely on specialized gestures. The transmission of these so-called motor habits necessitates direct communication between the teaching and the learning potters, including the demonstration of postures and the correction of ill-executed gestures; see also Marchand 2010, 8 f.; Gosselain 1998, 94 f.; Gosselain 2011, 216–218. For the discussion about *savoir-faire*, as opposed to *savoir-dire*, see e.g., <<http://ddd.uab.cat/pub/tda/11349263n1p99.pdf>> (28. 01. 2015).

³⁷ See von Rñden in this volume for a discussion of tacit and embodied knowledge.

³⁸ Shorey 1969.

Important information regarding the learning of motor activities also stems from motor-neurology. Thus, the process of adopting a complex physical skill will create motor memory, which, once established, allows for quick and efficient processing of a task³⁹. On the other hand this firmly established motor memory may impede the learning of different physical processes, or at least influence the execution of new movements, thus merging in a hybrid technique. These insights should be kept in mind when discussing the introduction of new shaping techniques in pottery production versus the inability or unwillingness to adopt new techniques, particularly if those skills are fundamentally different from one another (such as coiling vs. wheel throwing).

For the purposes of archaeologists, the concept of knowledge acquisition and propagation through personal interaction is fundamental for reconstructing processes underlying material culture changes: where technology rests on nonverbal knowledge and skills, its development and spreading indicates paths of human-to-human contacts.

What evidence there is for the transmission of craft skills in the ancient Mediterranean indicates that occupations were commonly acquired within family structures. Thus, makers' signatures on ceramics and sculpture occasionally indicate multiple generations of one family working in the same workshop (and see Plato, above)⁴⁰. The situation apparent from ancient sources seems to be the rule, as borne out by ethnographic studies which show that especially in small-scale societies, technological knowledge is mainly transmitted between closely affiliated individuals, often within the family and through parent-child learning⁴¹.

LINKING ARCHAEOLOGY AND HISTORY

With this connection in mind, we suggest that the transposition of Aeginetan ceramic traditions to Athens cannot be explained other than by the migration of Aeginetan potters. The transmission of a developed tradition, comprising manufacturing techniques and stylistic characteristics, as well as the break with earlier local traditions indicate that this was not a merger of Athenian know-how with Aeginetan expertise; rather, Aeginetan potters brought with them a fully-formed ceramic tradition which they continued in a new location.

In the following, we will briefly address questions arising from our interpretation of the material record: when did Aeginetan potters move to Athens, and did this happen as one event, or rather over a period of time; why did they migrate, and why to Athens; and how common was the migration of skilled craftspeople in antiquity.

As noted above, the earliest examples of Att2 occur in Athenian deposits dating to the late 5th century B.C. Since the bulk of the material studied derived from well deposits, the date range assigned is by necessity broad. With this limitation in mind, Att2 first occurs in deposits closed around 410–400 B.C.; start dates for these deposits vary between 450 and 425 B.C.⁴²

³⁹ Ethnographic studies demonstrate the stability of certain shaping techniques, especially of rough out operations: see e.g., Gosselain 2011, 217–220, stressing the impact of deeply rooted facets of identity on the choice of shaping techniques. For studies of the physical and mental processes involved in the learning of highly skilled motor activities, see e.g., Minar – Crown 2001, 373 f. and Loney 2007, 184–186, 201 f., each with further references. See also von Rüden in this volume.

⁴⁰ Potter's signatures on Attic black- and red-figured pots occasionally include patronymics; see e.g., Webster 1972, 9 f. and Scheibler 1995, 110–112. For families of sculptors, see e.g., Stewart 2012, 668–670 (Hellenistic workshop from Thorikos) and Badoud 2010 (Hellenistic bronze sculptors from Tyre). For families of craftspeople more generally, see the somewhat dated Burford 1972, 82–87.

⁴¹ See e.g., Gosselain 1998, 94; Gosselain 2011, 213–215; Wallaert-Pêtre 2001, 475.

⁴² Agora, deposits G 18:1-M (ca. 450–410 B.C.), A 20:4 (ca. 425–400 B.C.), H 12:6 U (ca. 425–400 B.C.), M 20:3 (ca. 420–400 B.C.); for the dates of these deposits see Sparkes – Talcott 1970, 383–399. Rotroff 2015, 184 mentions an early Attic version of a *lopas* which was found together with Aeginetan imports in deposit R 13:4 dating ca. 440–425 B.C.; this vessel has not been studied by the present authors. Kerameikos, Bau Z from contexts dated to the 4th quarter or the late 5th c. B.C. (Knigge 2005, 151 f. 159 nos. 309–312. 317. 375). Two Att2 *chytrai* were identified by the authors among the grave goods from the ›Gesandtengrab 2‹ at the Kerameikos: Knigge 1972, 603 nos. 16. 17 figs. 23. 24; another *chytra* (Knigge 1972, 604 no. 18), though classified as fabric

A number of examples of transitional pots – consistent with shapes and techniques employed for Att2 ware, while made from a fabric more closely reminiscent of Att1 – occur in contexts from the late third and fourth quarter of the 5th century B.C.⁴³. In fact, these pots may represent the earliest phase of ›Attico-Aeginetan‹ cooking ware, with newly arrived potters experimenting with locally known raw materials, before developing their own fabric recipe which suited their needs more closely.

On the basis of these dates, we suggest a start date for the production of ›Attico-Aeginetan‹ cooking ware in the late third quarter of the 5th century B.C. The transitional Att1 versions may have preceded the development of Att2 by some years, the latter ware being established by ca. 425 B.C. at the latest; the two versions do, however, occur together in several deposits, with Att2 generally outnumbering Att1.

The coincidence of the emergence of this ware with the historically attested events surrounding the expulsion of Aeginetans from their island in 431 B.C. may thus present the historical key for the reasons behind the decision to move, even though the precise mechanism behind the migration of Aeginetan potters can only be guessed at.

Thus, it is not clear whether the expulsion, attested in written sources, did indeed affect the island's population in its entirety, or perhaps only specific subsets, e.g., citizens, elite families, or rich individuals⁴⁴. Nor do we have information regarding the island potters' social and legal status. Based on information from ancient sources, as well as from ethnographic studies, we may assume that potters in general were not members of the elite. At the same time, given the long tradition of cooking ware production on Aegina, it is at least likely that these potters were members of old-established Aeginetan families (and hence citizens), rather than foreigners who had set up a trade at Aegina⁴⁵. It remains unclear, at any rate, whether the potters were among those expelled from the island, or if they left voluntarily⁴⁶.

Att1, is consistent with Aeginetan tradition in style, and probably also shaping technique. The burial's traditional dating to 433/432 B.C. is based on the tentative association with a grave stele (Knigge 1972, 595) which, however, has recently been called into question (Stroszeck 2002/2003, 169 f.); the 433/432 B.C. date is thus by no means a given. In fact, some of the pottery from the burial, as already suggested by date ranges in Knigge's catalogue, instead points towards a date at the turn from the 3rd to the 4th quarter of the 5th c. B.C. (especially a bolsal which is probably not among the very earliest examples of this shape, and the rather shallow Rheneia cup, Knigge 1972, 603 nos. 9, 10). Thus, the cooking pots from this grave for the time being may only generally represent the early phase of Att2 production, without providing evidence for the precise date of its emergence.

⁴³ Agora deposits R13:4 (ca. 440–425 B.C.), U 13:1 (ca. 425–380 B.C.), R 13:1 (425–400 B.C.), B 15:1-L (425–400 B.C.), M 20:3 (420–380 B.C.). See also the common type *chytra* Sparkes – Talcott 1970, no. 1930 pl. 93 (deposit J 18:7 ca. 400–350 B.C.), the portable hearth Sparkes – Talcott 1970, no. 2019 pl. 97 (G 18:1-M ca. 425–400 B.C.), and the cooking bell Sparkes – Talcott 1970, no. 2022 pl. 97 (deposit M 20:3-L ca. 420–400 B.C.). For an Att1 common type *chytra* from the ›Gesandtengrab‹ in the Athenian Kerameikos see above n. 42.

⁴⁴ The most dramatic description of this event is given by Thucydides (2, 27, 1) who records that the Aeginetans, together with their wives and children were expelled; see also Dion. Hal. de Thucydidē 15. Plutarch (Perikles 34, 2) reports the expulsion of ›all Aeginetans‹. Most other sources allude very generally to ›the Aeginetans‹ when referring to the exiled (see Weilharter 2010, 366 for a survey of the relevant sources). Williams 1987, 678 queries if the Athenians really attempted to remove the whole population of Aegina. Figueira 1991, 31 assumes a ›sizeable dislocation of persons from Aegina‹, including a large proportion of the political classes and many with seafaring expertise. For the expulsion of the Aeginetans, see also Weilharter 2008, 346. More generally on dispersed populations, see Millis 2010, 250–254, who argues that the dispersal of the population of a conquered polis is not an uncommon phenomenon and does not usually result in its complete and permanent eradication; indeed, the dispersal may be something of a literary motif in ancient sources.

⁴⁵ Cf. Scheibler 1995, 120–133 for potters in Archaic and Classical Athens who were able to pay for dedications on the acropolis and for marble grave markers with figured scenes. However, this evidence refers to potters of painted fine ware; the situation for utilitarian ware potters was surely different. In fact there is very little evidence that can be adduced to illuminate the social and economic position of these potters. For the engagement of metics in commercial activity and specifically in pottery production, see e.g., MacDonald 1981, 166 f.; Scheibler 1995, 123.

⁴⁶ See Papadopoulos 1997, 460 f. discussing the distinction between passive/forced and active/voluntary relocation which becomes in his opinion very blurred if seen against the backdrop of modes of production.

Assuming a choice in the matter, the decision of the Aeginetan potters to relocate to Athens, rather than anywhere else, may have been rooted in Athens' known status as a prime, reliable market for Aeginetan cooking pots. However, the attraction of the Athenian market by itself seems not to have been a sufficient reason to leave the island – otherwise émigré potters might have established a workshop earlier. Rather, the relocation of Aeginetan potters has to be linked to a changed situation on Aegina itself.

The expulsion of the Aeginetans was preceded by a long history of conflicts between the island and Athens. Due to its success in maritime trade in the Aegean and beyond, Aegina had become very prosperous, reaching the peak of its economic and political power in the late Archaic and early Classical periods⁴⁷. Cooking ware production flourished during the same period, when it supplied not only local demand, but also a sizeable export market. We do not yet have a clear picture of the organization of Aeginetan cooking ware production in this period, of the volume of production, or of the modes of distribution. However, cooking ware exports likely followed the established Aeginetan trade network, since most sites with finds of Aeginetan cooking ware also provide other evidence, such as written sources, for Aeginetan presence or trade activities⁴⁸.

In 456 B.C., Aegina was finally conquered by Athens, and in the following decades the once powerful and prosperous island underwent a gradual decline which coincided with a decline of its trade network. These developments culminated in the above-mentioned expulsion of the island's population in 431 B.C.

If the potters were not among the exiles of 431 B.C. anyway, a voluntary move can only be explained by the island no longer providing suitable conditions for their work. Thus, the events of these years may have resulted in a reduction of available labor, such as for sourcing and transporting raw materials, but first and foremost resulted in the collapse of the distribution system – the far-reaching Aeginetan trade network and its merchant fleet. To what extent a decline of demand on the island itself also was a factor is difficult to assess⁴⁹.

Although the output of the newly established Aeginetan production in Athens appears to have been substantial from the start, it is not possible to assess how many potters or workshops were involved in this initial phase: not much is known about workshop sizes of the time in general⁵⁰. At the same time, Athenian sources do not allow any firm conclusions regarding the number of resident Aeginetans in ca. 430/425 B.C., or indeed at a later date⁵¹. At any rate, the production of the Att2 ware appears quite consistent for more than a century. Nevertheless, a careful analysis of larger amounts of this pottery and more information about the range of shaping and finishing options is necessary to better understand whether a single potter or workshop is responsible for the development of this new potting tradition, or whether it represents a steady flow of Aeginetan potters migrating to Athens over a period of time.

Why the potters of the Att2 ware chose a new fabric, and which advantages if any it provided, remains to be resolved. The Att2 potters clearly had access to the traditional Att1 fabric, as illustrated by the above-mentioned transitional examples. It is possible that the finer texture and harder surface of Att2 better met the requirements of the migrant potters and, at least regarding outward appearance, Att2 is more akin than Att1 to Aeginetan cooking fabric.

The hostilities notwithstanding, Aeginetan potters may in fact have been welcome in Athens. Various testimonia indicate a certain need for qualified craftsmen in Athens in the 5th and 4th cen-

⁴⁷ For Aegina's history and economy in this time see e.g., Figueira 1981, 166–170. 264–279; Jennings 1990, 5–33. 107 f. 119 f.

⁴⁸ See Klebinder-Gauß 2012, 173. 198.

⁴⁹ The size of the population at Aegina after 431 B.C. is unknown; for this see e.g., Figueira 1991, 126.

⁵⁰ For the discussion on the size and organization of potters' workshops in Athens see e.g., Scheibler 1995, 109–120 favoring the idea of mainly small family enterprises and Lüdorf 2010 arguing for the existence of large-scale enterprises.

⁵¹ Osborne – Byrne 1996, 9 f. provide a collection of inscriptions referring to ›Aeginetans‹. The dates of these inscriptions, mostly gravestones, are however too broad to contribute much to our discussion; furthermore, the inscriptions may well refer largely to high-ranking individuals, which may not have included craftspeople.

turies B.C. and efforts to attract them from abroad⁵². The products of the new Att2 ware were obviously appreciated by the Athenian consumers; as this ware recalls in shape, style, and finish exactly the formerly popular Aeginetan products, it did not have to target a new clientele or adapt to new requests and tastes. The anti-Aeginetan resentments frequently perceptible in Attic literature obviously did not result in a rejection of the products of the migrant Aeginetan potters, just as in the 6th and early 5th centuries B.C. hostilities between the two poleis had not detracted from the abundant consumption of Aeginetan cooking pottery in Athens.

The migration of skilled craftsmen is well known in Greek history. Many known instances relate to the production of investment-intensive, public, or high-status objects, where the migrant individuals are conceived of as artists, or at the very least masters of their trade, such as Classical architects and sculptors. In the case of ceramics, dissemination of particular styles through migrant potters is usually adduced in the contexts of decorated fine wares; examples can be documented as early as the Aegean Bronze Age, and evidence is particularly plentiful for the Archaic and Classical periods where the presence of migrant potters is also indicated by foreign signatures, misspelled names, and intrusive letters on vases⁵³.

The example of migrant Aeginetan cooking pot makers in Athens suggests that this process existed well beyond the confines of the ›arts‹; utilitarian ware potters may well have been regarded as highly specialized craftspeople in their own right, whose considerable skill was desirable for any community to thrive⁵⁴. So far, the question of émigré cooking ware potters has not been addressed systematically; it is thus entirely possible that Athens was not the only place that saw the establishment of Aeginetan craftspeople after 431 B.C.

In 405 B.C. the Aeginetans were allowed to return to their island, and local production of traditional cooking ware resumed⁵⁵. At the same time, the new Attic cooking ware production Att2 continued. The Aeginetan workshop in Athens is thus not a short-lived phenomenon, since its products can be found in deposits until ca. 290 B.C.: the fabric group is around for ca. 125–150 years, perhaps corresponding to five or six generations of potters. Once established in Athens, the Aeginetan potters may have taken on Athenian apprentices; however, it is at least equally possible, and indeed likely, that the production of Att2 remained within an Aeginetan community of potters for the duration of its manufacture.

⁵² See e.g., Spahn 1995, 43. 47 f. 53; for testimonia such as Solon offering citizenship to immigrants who came to Athens to practice a trade (Plut. Solon 24, 2), see e.g., Dunbabin 1950, 200; Spahn 1995, 47; and Papadopoulos 2003, 223; see also later sources such as Philostratos from the 3rd c. A.D. (Soph. 2, 1, 7) who describes the city as polyglot, thanks largely to foreigners who came there to work: see Boegehold 1983, 90.

⁵³ For foreign signatures in Athenian vase painting, see e.g., Boardman 1975, 9 f.; Dunbabin, 1950, 200; and Papadopoulos 2003, 224 on potters producing ›Corinthian‹ fine ware pots in Attic fabric as early as the 7th c. B.C.; MacDonald 1981 on Athenian potters re-establishing themselves in the later 5th c. B.C. at various places in Italy, at Olympia, Corinth, Old Smyrna, and Olynthos; Williams 1986 on Euboian and Corinthian potters migrating to various parts of Italy already in the late Geometric period; see also Papadopoulos 1997, 456 f. with further references.

⁵⁴ See also Lis – Rückl – Choleva in this volume on mobile Aeginetan potters in the Late Bronze Age. See also Giannopoulou 2010, 53 f. on seasonally itinerant pithos potters in modern-day Messenia, Cyprus, and Crete and Spathari-Begliti 1992, 81–109 and Hampe – Winter 1965, 138. 141 f. 147. 150 on itinerant potters from Siphnos specialized in the production of cooking wares and water pots who began leaving the island in the 19th c. and moved to Thasos, Athens, and Aegina, where they produced the highly regarded ›Siphnian‹ casseroles, but using local raw materials.

⁵⁵ Klebinder-Gauß 2012, 200.

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