

## Interpreting Pottery ARCL 0100 Masters module: 15 credits

Lectures Fridays 9.00-11.00 am Room B13 Practical 1 hour either 11.00-12.00 or 12.00-1.00pm



Roman Pottery Assemblage, Reconstructed Roman Kiln at Butser, National Roman Fabric Reference Collection.

## Course Coordinator: Bill Sillar

b.sillar@ucl.ac.uk Office hours: 1.00-1.30 or 4.00 – 4.30 pm Fridays (B16) At other times/online via email

#### Assessments:

17<sup>th</sup> November - Illustrated pottery report (40%)

 $12^{\text{th}}$  January – Essay (60%)

#### IMPORTANT INFORMATION REGARDING ASSESSMENTS:

The **coursework coversheet** is available on the course Moodle pages and here: https://www.ucl.ac.uk/archaeology/current-students under "Policies, Forms and Guidelines".

Please enter your five-digit candidate code on the coversheet and in the subject line when you upload your work in Moodle.

Please use your five-digit candidate code as the name of the file you submit.

Please refer to https://www.ucl.ac.uk/archaeology/current-students/ioa-student-handbook/13-information-assessment https://www.ucl.ac.uk/archaeology/current-students/ioa-study-skills-guide/referencing-effectively-and-ioa-guidelines https://www.ucl.ac.uk/students/exams-and-assessments/academic-integrity https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-AI

for instructions on coursework submission, IoA referencing guidelines, marking criteria, UCL policies on penalties for late submission, over-length work, use of text generation software (AI) and avoiding academic misconduct.

#### 1. MODULE OVERVIEW

#### **Module description**

This is a 15 credit module for M.A., and M.Sc. students. It provides a general foundation to pottery studies, introducing students to the wide range of ways that archaeological pottery has been studied with a strong emphasises on understanding techniques used in pottery making and practical approaches to the study of pottery assemblages from excavations. The course starts with a consideration of the properties of clay in order to discuss how potters choose specific techniques to collect and process clays, to mix a clay paste that enhances the physical properties of 'natural' clay, and for the forming and firing of their ceramics. The potters' 'choice' of raw materials and techniques will be considered in relation to both the physical properties of the materials and the influence of the wider technological, economic, social and ideological setting of specific cultural situations. We shall then be able to look at archaeological pottery with a view to identifying the forming techniques that were used in the past; this will be based on examining the surface of the finished artefacts and fabric analysis. Examples from ethnographic and experimental work will be used throughout the course to illustrate some of the problems and potential of ceramic analysis. We shall discuss traditional approaches to pottery analysis (primarily based on the study of the morphology, decoration and distribution of the pottery) in relation to material science approaches to the analysis of ceramic technology, provenance and dating. We will review a number of themes that are commonly addressed through artefact analysis (such as: Technology, Organisation of Production, Typologies, Trade and Exchange, Consumption, and Style). The course aims to help students consider the relationship between artefacts and the people who used them, as well as how to relate artefact analysis to other aspects of archaeological research.

#### **Module Aims**

This course introduces students to a range of techniques used in pottery studies, a consideration of the research questions that ceramic research can be used to address, and a concern for the appropriate reporting of archaeological pottery. It aims:

- 1.To introduce students to the technology of pottery making from clay selection to firing with reference to archaeological and ethnographic examples.
- 2.To question the practice and purpose of diverse approaches to pottery processing, classification and analysis.
- 3.To explore the ways in which archaeological evidence of pottery production, trade and use can be studied and interpreted.

Upon successful completion of this course, students will, among other things:

- 1.Be familiar with the physical processes of pottery production and be able to give careful consideration to the social context within which it takes place.
- 2. Have an overview of recent archaeological approaches to the collection, analysis and interpretation of ceramics.
- 3.Be able to evaluate the relevance and applicability of various methods of ceramic analysis used the in archaeological units, museums and similar institutions in relation to wider archaeological research questions.
- 4. Begun to develop the observational skills needed to identify the form, surface and fabric of pottery and critically consider how this relates to the production or life history of the pot.

#### **Methods of Assessment**

This module is assessed by the following assignments, each of which is submitted via Moodle.

- 1) Illustrated report of a small number of sherds maximum 1000 words (40%)
- 2) Essay on a topic agreed with the course coordinator maximum 2000 words (60%)

#### Communications

- Moodle is the main hub for this course.
- Important information will be posted by staff in the **Announcements section of the Moodle page** and you will automatically receive an email notification for these.

- Please post any general queries relating to module content, assessments and administration in the Moodle forum: <u>News Forum for up-dates and questions (ucl.ac.uk)</u>
- For personal queries, please contact the co-ordinator by email: <u>b.sillar@ucl.ac.uk</u>

#### Week-by-week summary

Week	Date	Торіс
1	6 <sup>th</sup> Oct.	<b>Course Outline</b> : The pottery cycle (raw materials, forming, firing and use) and the interpretation of archaeological assemblages.
P1		Introducing the Norton pottery assemblage
2	13 <sup>th</sup> Oct.	<b>Preparing the paste</b> : selection and preparation of clay and temper, the clay/water system.
P2		Working with clay and temper
3	20 <sup>th</sup> Oct.	Pottery forming techniques: ethnographic and archaeological examples.
P3		Identifying pottery forming techniques - 1
4	27 <sup>th</sup> Oct.	Pottery firing and pottery fabrics
P4		Pottery fabrics
5	3 <sup>rd</sup> Nov	<b>Recording Pottery</b> : the excavation, identification and quantification of archaeological assemblages
P5		Norton Assemblage and assessment for 17 <sup>th</sup> November
6		Reading Week – no taught class
7	17 <sup>th</sup> Nov	Organisation of production: craft specialisation and standardisation
P6		Identifying pottery forming techniques - 2
8	24 <sup>nd</sup> Nov	Made for Export? Identifying sources and interpreting distribution patterns
P7		Norton Assemblage – production groups and type series
9	1 <sup>st</sup> Dec	Pottery Consumption: use, breakage and disposal.
P8		Pottery forms and functions
10	8 <sup>th</sup> Dec	Pottery decoration: stylistic analysis and explaining change
P9		Pottery decoration and identifying change
11	15 <sup>th</sup> Dec	Publishing Pottery: the afterlife of archaeological assemblages
P10	)	

#### Weekly Module Plan

The module is taught through in-person lectures and practical/seminars, as well as through online supplemental content. Students are required to undertake set readings prior to the lecturers and small group face to face practicals offered by-weekly on Tuesdays. On some occasions students will be asked to complete pre-class activities (non-examined) or come with pre-prepared questions or issues for discussion, in addition to the 2 pieces of assessed work and practice essay.

Lecture/seminar (2 hours) – Fridays 9-11.00 am, Institute of Archaeology, Room B13

Practicals (1 hour) – Fridays either 11.00-12.00 or 12.00-1.00, B13

#### Workload

This is a 15 credit module which equates to 150 hours of learning time including session preparation, background reading, and researching and writing your assignments. With that in mind you should expect to organise your time in roughly this way:

20 hours	Lecture / Seminars
10 hours	Staff-led practicals (seminar discussion) Face to face small group sessions
10 hours	Online content (available via moodle)
50 hours	Self-guided session preparation (reading, note-taking and online activities), about 5 hours a week
15	Preparing for 1 <sup>st</sup> assessment pottery report
45 hours	Reading for, researching, and writing final essay assessments

#### ASSESSMENT

Each assignment and possible approaches to it will be discussed in class, in advance of the submission deadline. If students are unclear about the nature of an assignment, they should discuss this with the module co-ordinator in advance (via class Moodle forum or in-person). You will receive feedback on your written coursework via Moodle, and have the opportunity to discuss your marks and feedback with the co-ordinator in their office hours.

For more details see the 'Assessment' section on Moodle. The coursework coversheet is available on the course Moodle pages and here: <u>https://www.ucl.ac.uk/archaeology/current-students</u> under "Policies, Forms and Guidelines".

Please make sure you enter your five-digit candidate code on the coversheet and in the subject line when you upload your work in Moodle, and **use your five-digit candidate code as the name of the file you submit**.

The <u>IoA marking criteria</u> can be found in the IoA Student Handbook (Section 13: Information on assessment). The <u>IoA Study Skills Guide</u> provides useful guidance on writing different types of assignment. Please note that **late submission, exceeding the maximum word count** and **academic misconduct** (**plagiarism**) will be penalized and can significantly reduce the mark awarded for the assignment and/or overall module result. On requirements, please do consult:

https://www.ucl.ac.uk/archaeology/current-students/ioa-student-handbook/13-information-assessment with sections 13.7–13.8: coursework submission, 13.10: word count, 13.12–14: academic integrity.

#### Prerequisites

There are no prerequisites for this course. This course is a complement to the 'Archaeological Ceramics' (ARCL0046) course taught by Patrick Quinn, which focuses in more detail on the application of materials analysis, particularly ceramic petrography. As not all students are taking both courses there will be some overlap in course content, particularly in the first couple of weeks.

## 1) Illustrated report of a small number of sherds maximum 1000 words (40%)

Photograph, Draw and describe 2 (two) pottery sherds – write a caption to each sherd and where possible identify aspects of their production and decoration techniques, as well as describing the fabric.

You need to describe each inclusion type in the fabric (there is likely to be two or more). If possible, identify what material the inclusions are made of, and state if they are 'natural' to the clay or added as 'temper', however if you are not able to do this then simply describe the colour and shape range of each inclusion type. Remember to look at the inclusions in the fracture and not only those visible on the surface, and describe any voids.

**Inclusion** Description; **Size** range; **Type**: 'natural', 'temper' or 'uncertain'; **Frequency**: (use the grain size chart to identify the density of each type of inclusion); **Sorting**; **Form**/shape of inclusions; **Roundness**; **Sphericity** 

Describe the properties of the pottery fabric – this is the clay body comparing the surface of the pot with the fresh break of the pottery sherd: **Colour: Firing; Hardness: Feel and Texture: Fracture** 

For this assessment you may, if you wish, use software to *check areas of academic writing such as structure, fluency, presentation, grammar, spelling, punctuation, and language translation.* But **NOT** to generate the content of your essay.

#### Readings for 1st Assessment

Roux, V. 2019. Chapter 2: Description of the Chaîne Opératoire: *Ceramics and society: a technological approach to archaeological assemblages*. Springer. 15-127

Prehistoric Ceramics Research Group 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication*. PCRG Occasional Papers 1 and 2 (3<sup>rd</sup> revised edition). https://www.prehistoricpottery.org/publications

**Pottery Recording Guide - Portable Antiquities Scheme** https://finds.org.uk/counties/findsrecordingguides/ceramics-including-the-pottery-guide/

### 2) Essay – an essay on your selected topic.

### maximum 2000 words (60%)

**NOTE**: Your essay will be assessed on the quality of the research, the breadth of reading, the depth of analysis and its completeness. You should seek to demonstrate a good knowledge of relevant literature and a critical consideration of the methodological and philosophical issues you have chosen to discuss. Even if you focus on a regional case study, or a specific assemblage of pottery, make sure you locate your study in relation to more general and theoretical literature. If you address a wider theoretical topic, then you are expected to draw upon specific examples and case studies in your answer. All written work should have a clear structure and be concisely and unambiguously expressed in good English. Illustrations (such as drawings, photographs, tables and charts) should be used where appropriate and frequently provide essential examples and present data succinctly, but their relevance must be explained at an appropriate point in the text. The topics chosen for each item of coursework should not overlap significantly with the topics of other items of coursework on this or other courses, although it may form the basis for the development of a dissertation research topic.

For this assessment you may, if you wish, use software to *check areas of academic writing such as structure, fluency, presentation, grammar, spelling, punctuation, and language translation.* But **NOT** to generate the content of your essay.

The basic readings for these essays will be found in relation to the appropriate lecture or practical class and the supplementary reading list provides further references organised around the similar themes to the lectures and essay topics. If you have any problems identifying or locating appropriate reading material please ask Bill Sillar for guidance.

#### **Essay Topics**

- 1 Archaeologists often use pottery fabrics to classify ancient ceramics. Critically discuss examples of this approach to consider its practical advantages and disadvantage as well as what research questions it does, or does not, address.
- 2 To what extent can the degree of standardisation in pottery production be measured, compared or interpreted?
- 3 Models for the organisation of pottery production have frequently been drawn from ethnographic examples. To what extent can these be applied to the interpretation of archaeological evidence?
- 4 Discuss different methods used to determine the source(s) of pottery and map its distribution. How would you begin to interpret which factors influenced this distribution pattern?
- 5 How successfully has the function of ancient pottery been studied?
- 6 How can archaeologists identify factors that influenced changes in pottery form and/or decoration over time?
- 7 Discuss what might be the advantages and disadvantages of adopting the *Chaîne Opératoire* approach to for analysing archaeological pottery?
- 8 To what extend is it possible and desirable to apply consistent standards to the planning, excavation, recording and reporting of pottery assemblages.
- 9 Discuss how you would analyse and report pottery from the excavations at Norton. What research questions could this material be used to address.

## You are welcome to write an essay on a different topic, but you must discuss and agree the exact wording of your essay title with the course co-ordinator in advance.

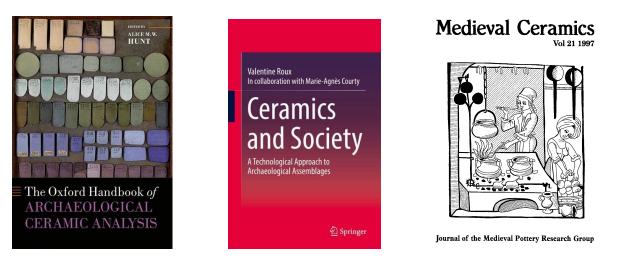


Josiah Wedgwood's trials made during his 4 year bid to produce a ceramic copy of the (5-25 AD) Roman glass vessel known as the 'Portland Vase' (successful vase exhibited in 1790 AD).

#### 2. Resources and Preparation for Class

#### Preparation for class

You are expected to read the two or three Essential Readings as well as watching any pre-recorded material each week. Completing the readings is essential for your effective participation in the activities and discussions that we will do, and it will greatly enhance your understanding of the material covered. **Further readings are provided via the Online Reading List** for you to get a sense of the range of current work on a given topic and for you to draw upon for your assessments. The online reading list is accessible through the Moodle page of the module.



### **GENERAL READING**

- Roux, V. 2019. Ceramics and society: a technological approach to archaeological assemblages. Springer.
  Hunt A. (ed.) 2016 The Oxford Handbook of Archaeological Ceramic Analysis Oxford: Oxford University Press
- Orton C., Hughes M. 2013 Pottery in Archaeology (2<sup>nd</sup> Edition) Cambridge University Press.
- Woodward A. and J. D. Hill (eds.) 2002 Prehistoric Britain: the ceramic basis Oxford : Oxbow
- Prehistoric Ceramics Research Group, Study Group for Roman Pottery and the Medieval Pottery Research Group 2016 A standard for pottery studies in archaeology Historic England.
- Scarcella S. 2011 Archaeological Ceramics: A Review of Current Research British Archaeological Reports International Series S-2193, Oxford: Archaeopress
- Sillar B. and M. Tite 2000 The challenge of 'technological choices' for material science approaches in archaeology. *Archaeometry* 2-20.
- Stark M. T. 2003 Current Issues in Ceramic Ethnoarchaeology Journal of Archaeological Research 11(3): 193-242
- Tite M. S. 1999 Pottery Production, Distribution, and Consumption the contribution of the physical sciences *Journal of Archaeological Method and Theory* 6(3): 181-233.

#### Some Useful Web sites:

Prehistoric Ceramic Research Group: <u>www.prehistoricpottery.org</u> Study Group for Roman Pottery: <u>https://romanpotterystudy.org.uk/</u> Medieval Pottery Research Group: <u>http://www.medievalpottery.org.uk/</u> Roman Pottery Research and Atlas: <u>http://potsherd.net/</u>

Toolkit for preliminary finds recording with terminology and templates <u>https://www.archaeologists.net/toolkits/finds-recording</u> Toolkit for specialist reporting <u>https://www.archaeologists.net/reporting-toolkit</u> National Roman Fabric Reference Collection <u>https://romanpotterystudy.org.uk/nrfrc/base/index.php</u> A Standard for Pottery studies in Archaeology

https://romanpotterystudy.org.uk/wp-

content/uploads/2016/06/Standard\_for\_Pottery\_Studies\_in\_Archaeology.pdf

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## Introduction to the course, the 'pottery cycle' and the interpretation of archaeological assemblages

Introduction to the 'pottery cycle' from raw materials to the firing and use of the vessel. The 'pottery cycle' is an organising principle for much of this course.

#### The Pottery Cycle

Roux, V. 2016 Ceramic Manufacture: the Chaîne Opératoire Approach. In: Hunt, A. (ed.), Oxford Handbook of Archaeological Ceramic Analysis, Oxford University Press. DOI: 10.1093/oxfordhb/9780199681532.013.8

#### **History of Pottery Studies:**

- Orton, C. and Hughes, M. 2013. History of Pottery Studies. In: Orton, C. and Hughes, M. *Pottery in Archaeology*. Cambridge University Press: Chapter1.
- Tite M. S. 2016 History of Scientific Research in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* Edited by Alice Hunt Print Oxford: Oxford University Press DOI: 10.1093/oxfordhb/9780199681532.013.2

#### **Chaîne Opératoire / Artefact Biography:**

- Duistermaat K. 2016 The Organization of Pottery Production: Toward a Relational Approach in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* Oxford University Press
- Gosden, Chr., Marshall, Y. 1999. The cultural biography of objects. World Archaeology 31/2, 169-178.
- Joy, J. 2009 Reinvigorating object biography: reproducing the drama of object lives, *World Archaeology*, 41:4, 540-556, DOI: 10.1080/00438240903345530
- Kopytoff, I. 1988. The cultural biography of things: commoditization as process. In: A. Appadurai (ed.) *The Social life of things; commodities in cultural perspective*. Cambridge: CUP, 64-94.
- Roux, V. 2019. Chapter 2: Description of the Chaîne Opératoire: *Ceramics and society: a technological approach to archaeological assemblages*. Springer. 15-127
- Schlanger, N. 2005. The chaîne opératoire. In: C. Renfrew, P. Bahn (eds.), *Archaeology, The key concepts*. London, Routledge.

National Roman Fabric Reference Collection <u>https://romanpotterystudy.org.uk/nrfrc/base/index.php</u>

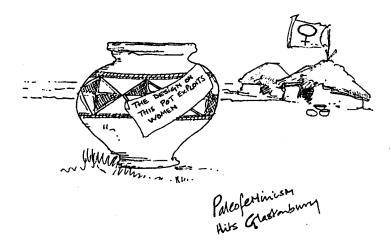


Fig 2. (from Sinclair and Baker 1988)

## 2 Preparing the paste: selection and preparation of clay & temper

The strength and appearance of a completed pot and the behaviour of the clay paste during production is dependent on the raw materials selected by the potter and the way that they are processed. In this lecture/seminar we will discuss the geological origins and physical properties of clay and inclusions, the various methods that potters use to prepare and mix these materials, and how this alters the quality and behaviour of the clay paste. In order to explain this we will need to discuss the clay/water system (i.e how the properties of clays are dependent both on their crystal structure and the amount of water between the clay crystals) and how the potter works with these natural phenomena.

#### **Essential Reading:**

- Montana G. Ceramic Raw Materials in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* Oxford: Oxford University Press DOI: 10.1093/oxfordhb/9780199681532.013.7
- Gosselain O. P. and A. Livinstone-Smith 2005 The Source: Clay selection and processing practices in Sub-Saharan Africa in A. Livingstone Smith et al. (eds.) *Pottery Manufacturing Processes: Reconstruction and Interpretation*, BAR International Series 1349: 33-47

- Anderson S. L. 2016 A Clay source provenance survey in Northwest Alaska: Late Holocene ceramic production in the Arctic, *Journal of Field Archaeology*, 41:3, 238-254, DOI: 10.1080/00934690.2016.1167488
- Gosselain O. P. 1999 In pots we trust: the processing of clay and symbols in Sub-Saharan Africa *Journal of Material Culture* 4(2): 205-230
- Hudson, N., L. Gentelli & J. Trampier 2018 Importing Clay for Local Pottery Production in the 4th Century b.c. at Tell el-Timai, Egypt, *Journal of Field Archaeology* 43(1) 1-16, doi: 10.1080/00934690.2017.1410924
- Ixer, R., Lunt, S., Sillar, B. and Thompson P. 2014 Microscopic Rocks and Expansive Empires: Investigating Inca Ceramics from Cuzco, Peru. Archaeology International 17 122-136
- Pollard A. M. and C. Heron 2008 The Geochemistry of Clays and Provenance of Ceramics in: Pollard A. M. and C. Heron Archaeological Chemistry (2<sup>nd</sup> edition) The Royal Society of Chemistry, Cambridge Chapter 4: 98-143.
- Sanacreu D. A. 2015 Materiality, Techniques and Society in Pottery Production: The Technological Study of Archaeological Ceramics through Paste Analysis De Gruyter (available free as a Kindle Edition)
- Sillar B. 1996 The Dead and the Drying: Techniques for Transforming People and Things in the Andes *Journal of Material Culture* 1(3) 259-290.
- Smith A. L. 2000 Processing clay for pottery in Northern Cameroon: social and technical requirements Archaeometry 42(1): 21-42
- Woodward A. 2002 Inclusions, Impressions and Interpretations In A. Woodward and J. D. Hill (eds.) *Prehistoric Britain: the ceramic basis* Oxford : Oxbow 106-118

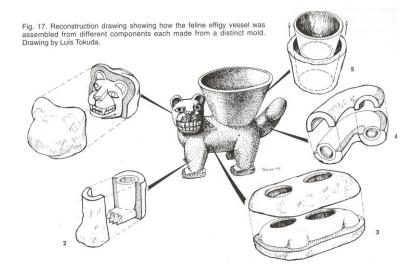
## **3** Pottery Forming Techniques: ethnographic and archaeological examples

There are a wide range of potential pottery production methods (e.g. pinching, coiling, hammer and anvil, moulding, or throwing). During this lecture we will explore a number of these methods, what tools they require, and the implications for the organisation of production, and what evidence we can use to interpret the use of these methods. We will again highlight the relationship between the clay paste prepared by the potter and the choice of forming techniques.

#### **Essential Reading:**

- Gosselain, O. P. 2000. Materializing Identities: An African Perspective. *Journal of Archaeological Method* and Theory, 7: 187-217
- van der Leeuw S. (ed.) 1993 Giving the potter a choice: conceptual aspects of pottery techniques in P. Lemonnier (ed.) *Technological Choices: transformation in material culture since the Neolithic* London: Routledge 238-288
- Roux, V. 2019. Chapter 2 Description of the Chaîes Opératoires *Ceramics and society: a technological approach to archaeological assemblages*. Springer. 15-128 (<u>This is essential for the Porfolio</u>)

- Courty M. A. and V. Roux 1995 Identification of wheel throwing on the basis of ceramic surface features and microfabrics *Journal of Archaeological Science* 22:17-50.
- Gomart, L., Weiner, A., Gabriele, M., Durrenmath, G., Sorin, S., Angeli, L., and Binder, D. 2017 Spiralled patchwork in pottery manufacture and the introduction of farming to Southern Europe. *Antiquity*, 91(360), 1501-1514. doi:10.15184/aqy.2017.187
- Loney H. L. 2000 Society and technological control: a critical review of models of technological change in ceramic studies *American Antiquity* 65(4):646-668 + responses *American Antiquity* 66(4):726-41
- Mahias M-C. (1993) 'Pottery Techniques in India: Technical variants and social choice' in: P. Lemonnier (ed) *Technological Choices: transformations in material cultures since the Neolithic*, pp.157-180. London: Routledge.
- Sillar B. and M. Tite 2000 The challenge of 'technological choices' for material science approaches in archaeology. *Archaeometry* 2-20.



### 4

## Pottery Firing Methods and Pottery Fabrics

We will discuss some of the factors that influence the choice of firing technique, the degree to which these can be recognised using archaeological evidence and their effect on the fabric of the pottery.

Isobel Thompson: Firing and kilns: examples from the transition to Roman technology in Britain

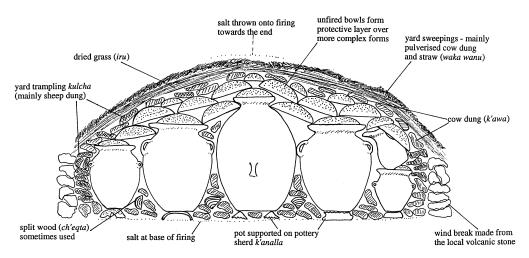
#### **Essential Reading:**

- Whitbread I. 2016 Fabric Description of Archaeological Ceramics in A. Hunt (ed.) *The Oxford Handbook* of Archaeological Ceramic Analysis Oxford: Oxford University Press DOI: 10.1093/oxfordhb/9780199681532.013.13
- Gosselain O. P. 1992 Bonfire of the Enquiries. Pottery firing temperatures in archaeology: what for? Journal of Archaeological Science 19(2):243-259
- Livingstone-Smith, A. 2001 Bonfire II: The Return of Pottery Firing Temperatures. In *Journal of Archaeological Science* 28: 991-1003.

#### Essential 1<sup>st</sup> assessment Reading:

Prehistoric Ceramics Research Group 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication*. PCRG Occasional Papers 1 and 2 (3<sup>rd</sup> revised edition). https://www.prehistoricpottery.org/publications

- Adan-Bayewitz D. and M. Wieder 1992 Ceramics from Roman Galilee: A Comparison of Several Techniques for Fabric Characterization *Journal of Field Archaeology* 19: 189–205
- Paynter S. and M. Tite 2001 The evolution of Glazing Technologies in the Ancient Near East and Egypt in: A. J. Shortland (ed.) *The Social Context of Technological Change: Egypt and the Near East, 1650-1550 BC.* Oxbow Books, Oxford. 239-254
- Bourriau, J. L. Smith and M. Serpico 2001 The Provenance of Canaanite Amphorae found at Memphis and Amarna in the New Kingdom Egypt in: A. J. Shortland (ed.) *The Social Context of Technological Change: Egypt and the Near East, 1650-1550 BC.* Oxbow Books, Oxford. 113-146
- Sillar B. 2000 'Dung by Preference: The choice of fuel as an example of how Andean pottery production is embedded within wider technical, social and economic practices.' *Archaeometry* 43-60.
- Tite, M. S., Freestone, I., Mason, R., Molera, J., Vendrell-Saz, M. and Wood, N. 1998 Lead glazes in antiquity methods of production and reasons for use. *Archaeometry*, 40: 241-260.
- Tomber R. & J. Dore 1998 *The National Roman Fabric Reference Collection* Museum of London Archaeology Service Monograph No. 2. <u>http://romanpotterystudy.org.uk/nrfrc/base/index.php</u>



Ethnographic Pottery Firing: Raqchi, Peru

## 5 Recording Pottery: the excavation, identification, quantification and reporting of archaeological assemblages

The study of archaeological pottery starts at the point of excavation when important decisions are made about the material recovered, contextual information recorded and initial cleaning and sorting of the pottery. Archaeological pottery is usually sorted through a series of stages, initially separating it from other excavated materials, then sorting the pottery into different groups or categories. At what stage is it necessary to consider the research questions that the pottery is being used to address and how the pottery assemblages will be related to previous work in the area? In this seminar we will consider how archaeological pottery is treated from the moment of excavation to its presentation in the finds report and how this affects the types of data that are available for interpretation, including a consideration of the use of illustrations, tables, graphs and other ways of summarising and presenting data

#### **Essential Reading:**

Prehistoric Ceramics Research Group, Study Group for Roman Pottery and the Medieval Pottery Research Group 2016 A standard for pottery studies in archaeology Historic England. (download from: https://romanpotterystudy.org.uk)

#### **Further Reading:**

Aimers, J. J., 2007 The curse of the Ware: using ceramic systems in Belize in J. Morris, S. Jones, J. Awe and C. Helmke (eds.) *Research in Belizean Archaeology* Vol 4

- Brooks A. and G. Connah 2007 A hierarchy of servitude: ceramics at Lake Innes Estate, New South Wales *Antiquity* 81: 133-147
- English Heritage 2006 Management of Research Projects in the Historic Environment The MoRPHE Project Managers'Guide https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/
- Institute of Field Archaeologists 2000. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials.*
- Orton C., Hughes M. 2013 *Pottery in Archaeology* (2<sup>nd</sup> Edition) Cambridge University Press. Chapters 4, 6, 9, 14 and 15.
- Prehistoric Ceramics Research Group 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication.* PCRG Occasional Papers 1 and 2 (3<sup>rd</sup> revised edition). <u>https://www.prehistoricpottery.org/publications</u> (This is essential for the Porfolio)



Fig. 4.1. Life in the pot shed. Painting by Janis Mitchell, from *The hamster history of Britain*, published by Thames and Hudson Ltd., (© Thames and Hudson 1991

## 6 Organisation of production, craft specialisation and Standardisation

The organisation of pottery production, particularly the degree of craft specialisation, has been used by several researchers as a method of assessing the social and economic organisation of past societies. In this seminar we will discuss how the evidence for pottery making (e.g. the location, spatial organisation, scale and intensity of production) can be interpreted from archaeological evidence.

#### **Essential Reading:**

- Crown P. L. 2007 Life histories of pots and potters: situating the individual in archaeology American Antiquity 72(4) 677-690
- Duistermaat K. 2016 The Organization of Pottery Production: Toward a Relational Approach in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* Oxford: Oxford University Press DOI: 10.1093/oxfordhb/9780199681532.013.9
- Harry K. G. 2005 Ceramic specialization and agricultural marginality: Do ethnographic models explain the development of specialized pottery production in the prehistoric American Southwest? *American Antiquity* 70(2): 295-319

Take a look at:

Historic England 2015 <u>Archaeological and Historic Pottery Production Sites | Historic</u> England

- Berg I. 2004 The meaning of standardisation: conical cups in the late Bronze Age Aegean *Antiquity* 78(299): 74
- Brown A. E. and H. L. Sheldon 2018 *The Roman Pottery Manufatruing Site in Highgate Wood: excavations 1966-1978* Oxford: Archaeopress
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- Frankel, D. and J. M. Webb 2014 A potter's workshop from Middle Bronze Age Cyprus: new light on production, scale and variability *Antiquity* 88(340): 425-440
- Hagstrum M. B. 1985 Measuring Prehistoric Ceramic Craft Specialization: a Test Case in the American Southwest *Journal of Field Archaeology* 12: 65-75
- London G. A. 1986 Response to Melissa Hagstrum, 'Measuring Prehistoric Ceramic Craft Specialization: a Test Case in the American Southwest' *Journal of Field Archaeology* 13: 510-1
- Phillips, David A. Jr. 2006 Comment on Harry's Discussion of Ceramic Specialization and Agricultural Marginality in the Prehistoric U.S. Southwest *American Antiquity* 71(2): 397-398
- Quinn, P., Zhang, S., Xia, Y., & Li, X. 2017 Building the Terracotta Army: Ceramic craft technology and organisation of production at Qin Shihuang's mausoleum complex. *Antiquity*, 91(358), 966-979. doi:10.15184/aqy.2017.126
- Rautman M. 1998 Handmade Pottery and Social Change: the view from Late Roman Cyprus *Journal of Mediterranean Archaeology* 11(1): 81-104
- Sillar B. and G. Ramón Joffré 2016 'Using the present to interpret the past: The role of ethnographic studies in Andean Archaeology' *World Archaeology* 48(5): 656-673
- Underhill, A. P. 2003 Investigating Variation in Organization of Ceramic Production: An Ethnoarchaeological Study in Guizhou, China. *Journal of Archaeological Method and Theory* 10(3):203-275.

## Made for Export? Identifying sources and interpreting distribution patterns

Pots are frequently traded, exchanged or transported away from their production sites. This is important evidence from which we can interpret some aspects of socio-economic relationships in the past, ideally, this requires the identification of the source of the raw materials (i.e. relating the pottery fabric to the geological origin of the raw materials) or production sites (e.g. locating the kilns and piles of wasters at the production centre). We can also prepare distribution patterns by recording the location and quantity of specific pottery forms, styles or fabric types, but, the interpretation of these distribution patterns should include a careful consideration of how this evidence was collected and what has affected the intensity and reporting of previous archaeological work used in the study.

#### **Essential Reading:**

7

Orton C., Hughes M. 2013 Pottery in Archaeology (2<sup>nd</sup> Edition) Cambridge University Press. Ch.17

- Knappett, C., Kilikoglou, V., Steele, V. and B. Stern, 2005. 'The circulation and consumption of Red Lustrous Wheel-made ware: petrographic, chemical and residue analysis,' *Anatolian Studies* 55, 25-59.
- Jordan, P., Gibbs, K., Hommel, P., Piezonka, H., Silva, F., & Steele, J. (2016). Modelling the diffusion of pottery technologies across Afro-Eurasia: Emerging insights and future research. *Antiquity*, *90*(351), 590-603.

#### **Further Reading:**

- Albero Santacreu, D. M. Calvo Trias, and J. García Rosselló 2016 Formal Analysis and Typological Classification in the Study of Ancient Pottery in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* Oxford: Oxford University Press DOI: 10.1093/oxfordhb/9780199681532.013.12
- Arnold D. E., H. Neff, and R. L. Bishop 1991 Compositional Analysis and 'sources' of pottery: an ethnoarchaeological Approach American Anthropologist 93: 70-90
- Connell S. V. 2002 Getting Closer to the Source: Using Ethnoarchaeology to Find Ancient Pottery Making in the Naco Valley, Honduras *Latin American Antiquity* 13(4): 401-417.
- Hodder I. 1974 Regression analysis of some trade and marketing patterns World Archaeology 6(2), 172-189.
- Morris E. L. and A. Woodward 2003 Ceramic Petrology and Prehistoric Pottery in the UK *Proceedings of the Prehistoric Society* 69 279-303
- Tite M. S. 1999 Pottery Production, Distribution, and Consumption the contribution of the physical sciences *Journal of Archaeological Method and Theory* 6(3): 181-233.
- Tomber R. & J. Dore 1998 *The National Roman Fabric Reference Collection* Museum of London Archaeology Service Monograph No. 2.
- WaksmanY. 2016 Provenance Studies: Productions and Compositional Groups in A. Hunt (ed.) *The Oxford Handbook of Archaeological Ceramic Analysis* DOI: 10.1093/oxfordhb/9780199681532.013.10

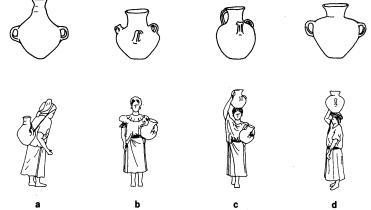


Figure 15.4 Different styles of *tinajas* (water carrying jars) in highland Guatemala and different ways of carrying them: *a*, northwest

highlands; b, eastern highlands; c, southeast coast; d, north-central highlands. After Reina and Hill 1978, map 10.

## 8 Pottery Consumption: use, breakage and disposal

This session will consider the function of pottery and how we can analyse pottery use from the vessels themselves (e.g. size, form, surface appearance, residue analysis) and wider archaeological evidence (e.g. the context in which the vessels were recovered, iconographic evidence) We will discuss the importance of studying pottery breakage and disposal patterns as an aid to interpreting the use of space around the site, in relation to understanding the function and value of the pottery within consumption sites, and to help understand taphonomic processes on site.

#### **Essential Reading:**

- Roffet-Salque, M., Dunne, J., Altoft, D.T., Casanova, E., Cramp, L.J.E., Smyth, J., Whelton, H.L. and Evershed, R.P., 2017. From the inside out: Upscaling organic residue analyses of archaeological ceramics. *Journal of Archaeological Science: Reports*, 16: 627–640
- Vieugue, J., 2014. Use-wear analysis of prehistoric pottery: Methodological contributions from the study of the earliest ceramic vessels in Bulgaria (6100-5500BC). *Journal of Archaeological Science* 41: 622-630.
- Goulder J. 2010 Administrators' bread: an experiment-based re-assessment of the functional and cultural role of the Uruk bevel-rim bowl *Antiquity* 84(324): 351-362

- Arthur J. W. 2002 Pottery Use-alteration as an indicator of socioeconomic status: an ethnoarchaeological study of the Gamo of Ethiopia *Journal of Archaeological Method and Theory* 9(4) 331-355
- Biddulph, Edward 2005 Last Orders: choosing pottery for funerals in Roman Essex *Oxford Journal of Archaeology* 24(1): 23-45
- Bollong C. A. 1994 Analysis of Site Stratigraphy and Formation Processes Using Patterns of Pottery Sherd Dispersion *Journal of Field Archaeology* 21 15-28
- Bunimovitz, S., & Lederman, Z. (2016). Opium or oil? Late Bronze Age Cypriot Base Ring juglets and international trade revisited. *Antiquity*, *90*(354), 1552-1561. doi:10.15184/aqy.2016.177
- Cessford, C. 2018 Moving in mysterious ways: The use and discard of Cambridge college ceramics. *Antiquity*, 92(364), 1076-1093. doi:10.15184/aqy.2018.115
- Charters S., R. P. Evershed, L. J. Goad, A. Leyden, P. W. Blinkhorn, and V. Denham 1993 Quantification and distribution of lipid in archaeological ceramics: implications for sampling potsherds for organic residue analysis and the classification of vessel use *Archaeometry* 35(2): 211-221.
- Costin, C. and Earle, T. 1989 Status distinction and legitimation of power as reflected in changing patterns of consumption in Late Prehispanic Peru. *American Antiquity* 54:691-714.
- Forte, V., 2018. Cooking traces on Copper Age pottery from central Italy: An integrated approach comprising use wear analysis, spectroscopic analysis and experimental archaeology. *Journal of Archaeological Science: Reports* 18 (April), pp. 121-138.
- Frankel, D. and Webb, J. M. 2001 Population, Households and Ceramic Consumption in a Prehistoric Cypriot Village. *Journal of Field Archaeology*, 28: 115-129.
- Frink, L. and K. G. Harry 2008 The beauty of 'ugly' Eskimo cooking pots American Antiquity 73(1): 103-20
- Gibbs, K., Isaksson, S., Craig, O., Lucquin, A., Grishchenko, V., Farrell, T., ... Jordan, P. (2017). Exploring the emergence of an 'Aquatic' Neolithic in the Russian Far East: Organic residue analysis of early hunter-gatherer pottery from Sakhalin Island. *Antiquity*, *91*(360), 1484-1500. doi:10.15184/aqy.2017.183
- Hayden B. & A. Cannon 1983 Where the garbage goes: Refuse disposal in the Maya highlands *Journal of Anthropological Archaeology* vol.2. 117-163.
- Heron C. and R. P. Evershed 1993 The analysis of organic residues and the study of pottery use in Schiffer M. B. (ed.) *Archaeological Method and Theory* Vol. 5 Academic Press. New York 247-284.
- Power, R., & Tristant, Y. 2016. From refuse to rebirth: Repositioning the pot burial in the Egyptian archaeological record. *Antiquity*, *90*(354): 1474-1488.
- Skibo J. M. 2013 Understanding Pottery Function Springer, New York
- Tite M. S., V. Kilikoglou and G. Vekinis 2001 Review Article: Strength, toughness and thermal shock resistance of ancient ceramics, and their influence on technological choice. *Archaeometry* 43(3) 301-324. see also the discussion of this article in *Archaeometry* 45: 163-183.
- Vindrola-Padrós B. 2023 Outline of a theory of breakage *Anthropological Theory* DOI link: <u>https://doi.org/10.1177/14634996221139900</u>

## 9 Pottery Decoration, Stylistic Analysis and explaining change

#### Essential Reading – please read at least two of the following:

- Bray, T. L. 2017 Partnering with Pots: The Work of Objects in the Imperial Inca Project Cambridge Archaeological Journal 28:2 243-257
- Hardin M. A. and B. J. Mills 2000 The Social and Historical Context of Short-Term Stylistic Replacement: A Zuni Case Study *Journal of Archaeological Method and Theory* 7(3): 139-163
- Hegmon M. and S. Kulow 2005 Painting as agency, style as structure: innovations in Mimbres pottery designs from southwest New Mexico *Journal of Archaeological Method and Theory* 12(4) 313-334
- Wengrow D. 2001 The evolution of simplicity: aesthetic labour and social change in the Neolithic Near East *World Archaeology* 33(2): 168-188

#### **Further Reading:**

- Braun D. P. 1991 Why Decorate a Pot? Midwestern household pottery, 200 B.C.-A.D.600 *Journal of Anthropological Archaeology* 10: 360-397.
- Carvajal López J. C. 2009 Pottery production and Islam in south-east Spain: a social model Antiquity 83: 388-98
- David, N., J. Sterner & K. Gavua 1988 Why pots are decorated Current Anthropology 29:365-388.
- de La Fuente G. A. 2011 Urns, Bowls and Ollas: Pottery-making practices and technical identity in the Southern Andes during the Late Period (ca. AD 900- AD 1450) Catamarca, North-western Argentine region, Argentina) *Latin American Antiquity* 22(2) pp. 224-252
- DeBoer W. R. & J. A. Moore 1982 The measurement and meaning of stylistic diversity. In: *Nawpa Pacha* Vol.20, p147-162.
- Lepère, C. 2014. Experimental and Traceological Approach for a Technical Interpretation of Ceramic Polished Surfaces. *Journal of Archaeological Science*, 46: 144-155.
- Loney H. L. 2000 Society and technological control: a critical review of models of technological change in ceramic studies *American Antiquity* 65(4):646-668 + responses *American Antiquity* 66(4):726-41
- Nanoglou, St. 2008. Qualities of humanness; material aspects of Greek Neolithic anthropomorphic imagery. *Journal* of Material Culture 13/3, 311–334.
- Shanks M. 1992 Style and the design of a perfume jar from an archaic Greek city state *Journal of European Archaeology* 1:77-106.
- Skibo J. M., Schiffer M. B. & Kowalski N. 1989 Ceramic Style Analysis in Archaeology and Ethnoarchaeolgy: Bridging the Analytical Gap *Journal of Anthropological Archaeology* 8: 388-409.



Copy of enamel jug made and decorated by Shipibo-Conibo Potter, Ucayali River, Peru

# 10 Publishing Pottery: Overview and the afterlife of archaeological assemblages

FOR this CLASS we will combine the groups and run the class from 9.00-1.00pm

## Some questions to consider when reviewing ceramics reports

Choose a site report or a detailed report of an assemblage of pottery from a period and/or a region of the world that you are interested in and review the role that the ceramic report has in relation to both this particular site and the study of contemporary ceramics from the area.

What are the intentions of the report? Does the author explain these clearly? (e.g. what research questions were they addressing? Are these mainly related to the production, distribution and use of the pottery, or to the dating, function and cultural affiliation of the site?

How easy is it to identify which ceramics came from which archaeological contexts? Can you relate the ceramics to other finds or other environmental data from the same context?

Is there any description of how the ceramics were excavated, cleaned and catalogued? Does the author describe the methods of analysis used?

How are the ceramics described? (e.g. fabric descriptions, illustrations, quantification of data).

How is the pottery quantified? (e.g. by fabric, form, type or date, is this in relation to each context, or broad periods.

What features of the ceramic are highlighted in the illustrations (e.g. do the drawings, photographs, tables etc. emphasise fabric, form, surface treatment, decoration, or manufacturing technique?) What percentage of the pottery is illustrated? Are these illustrations described as 'typical' or 'exceptional' pieces?

How is this ceramic report related to previous work on contemporary pottery? (e.g. by reference to previous reports and pottery typologies or previous research questions.)

How easy would you find it to compare the illustrations and descriptions in this report to an assemblage of pottery from another archaeological site?

Does the report explain where this ceramic assemblage is now? (In case you want to go back and do your own analysis?)

How is this ceramic analysis used in the rest of the site report? Does it contribute to the research agenda for the site as a whole?