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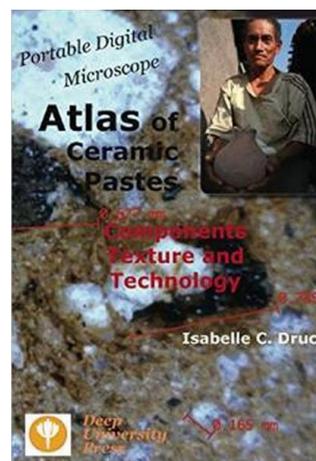
## BOOK REVIEW

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Isabelle C. Druc. *Portable Digital Microscope - Atlas of Ceramic pastes: Components, Texture and Technology*. Deep University Press, Blue Mounds, Wisconsin, 2015, 120 pages, 140 + colour photographs.



This slim paperback of 120 pages is a (sometimes perplexing) translation of a 2014 Spanish atlas by Dr Isabelle Druc and Lisenia Chavez but with slightly different authors (*Pastas Ceramicas En Lupa Digital: Componentes, Textura y Tecnologia* by Isabelle C. Druc and Lisenia Chavez. Deep University Press, 2014). In this version they are joined by Bruce Velde who “had the kindness to review in detail the English version” and provided some of the geological background.

In the introduction Dr Druc says that “a macroscopic study even with a digital microscope with good magnification cannot replace the knowledge gained from a petrographic study”. This truism cannot be said often enough and in an ideal world, serious archaeological ceramic specialists would take courses in transmitted light petrography (alongside learning to pot, acquire a working knowledge of the relevant Classical languages etc.) before learning and applying the skill through experience. Sadly this is unlikely to become standard practice and in the real world one of the methods of supplying instant experience is the pictorial atlas, in the present case, showing typical/characteristic examples of pastes.

The problems associated with petrographical atlases in geology/material studies are legion, mainly to do with colour reproduction, indeed, one opaque ore atlas was even reviewed as “the most dangerous book in the world”. This reviewed atlas by Dr Druc is far from that.

This, as an atlas should be, is heavy on photographs and lighter on text. The first twenty pages are text-rich and deal with methodology, it gives a practical description dealing with sampling and preparing a freshly broken ceramic surface, plus gives some basic sedimentology and geological definitions. Many of these basic sedimentary data (grain size, sorting, shape, etc.) are neatly combined in a small pocket-size plastic card “Leicester University grain size scale” produced by Geo Supplies\* intended for use in the field by geologists, and is an absolute must for speedily quantifying pastes.

The next chapter (30 pages) is a guide to the identification of mineral and lithic clasts within a paste. It is very well illustrated and for every mineral/mineral group and major rock type there is an annotated photomicrograph taken with the portable digital microscope, plus a caption. This is often accompanied by a photograph of the sherd or complete pot, plus there are rare photomicrographs taken with a petrological microscope. This chapter is not as successful as others, but it is a credit to the digital photographs that misconceptions can be seen.

The identification of the pyroxenes (page 37) appears to have confused inter-cleavage angles with the angles between crystal faces, and on the next page there is confusion and perhaps transposition between opaque minerals, (metal) oxides and hydroxides. Cleavage and twinning, being important diagnostic properties of many minerals macroscopically, could be explained more clearly (some of this is may be due to the loose translation). A review and tightening of definitions, correcting some mineral names (alongside doing the same in the glossary) would not be arduous but is needed.

More generally there is much white space around some of the photographs and it could be used to provide longer captions; this is true for all the chapters. It is better to describe everything that is visible and potentially bore the reader than leave them puzzling. Dr Druc is not alone in this, many texts/atlas in the last decades have this same fault, and for some, this is accompanied by poor photography. It is very difficult to produce a useful photograph/photomicrograph of fine-grained ceramic pastes (ores, rocks, etc.) and when successful ones are obtained, then every last bit of information should be given. The atlases produced from the University of Manchester Geology Department in the late 70s/early 80s by Prof. Mackenzie and colleagues were, and remain, examples of how to integrate photographs and text.

The next 30 page chapter “Raw materials and ceramic technology” is a delight and most effective. To ceramic archaeologists who do not come from an anthropological background/tradition (mostly non-Americans) the addition of ‘ethnographical’ details enhances the pictures and their descriptions. A simple, straightforward, enlightening chapter, much of it dealing with temper but with a splendid section on manufacturing techniques and how these can be recognised within the fabric of the paste; there are also good, shorter sections on firing and slips.

The last main section is on image analysis and quantitative image analysis (grain size analysis) using the portable digital microscope, mainly discussed by the use of worked examples. A pity there is not more of this. Finally there are appendices listing the archaeological sites found within the text, references and a glossary. The latter has a delightful mistranslation, defining clays as phlosilicates (sic).

Does the book succeed in its aim of showing how the use of the portable digital microscope (plus laptop), with its ability to record and store visual macroscopical images at higher magnifications, is it a significant advance in initial ceramic studies,

especially for establishing rapid, broad groups and then its subsequent use as a triage tool for choosing material for more detailed studies? Yes, but perhaps not with beginners (as with most atlases they may be overwhelmed) but certainly in the hands of someone already familiar with the macroscopical examination of sherds and with a little petrographical knowledge. Hence this slim book bridges the gap between Orton and Hughes' outstanding *Pottery in Archaeology* and Quinn's more petrographical *Ceramic Petrography* in terms of practical pottery studies (see review by Ixer 2014).

In summary, the potential use of the portable digital optical microscope for field use is high, and this book should help to ensure it is used correctly.

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### NEWS

The editors and team of FACEM\*, Verena Gassner, Babette Bechtold and Maria Trapichler, are pleased to announce that the 4<sup>th</sup> edition of FACEM is now online (<http://facem.at>).

#### ***Provenance Studies on Pottery in the Southern Central Mediterranean from the 6<sup>th</sup> to the 2<sup>nd</sup> c. B.C.***

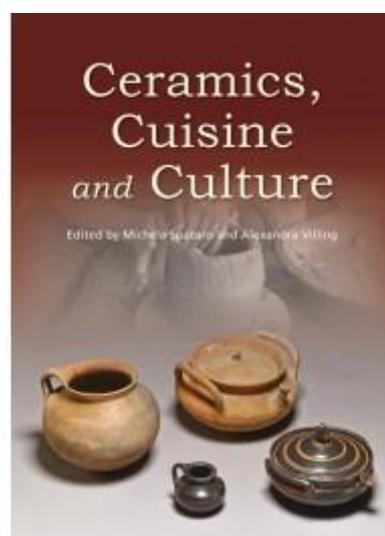
The fourth release of FACEM on 6<sup>th</sup> June 2015, mainly focuses on the edition of Punic amphorae productions of western Sicily, and presents new data on both archaeological and archaeometric research

on local glazed wares, coarse wares, bricks and transport amphorae from Velia.

\*FACEM (Fabrics of the Central Mediterranean) is a database for specialists of Greek, Punic and Roman pottery, first released on 6<sup>th</sup> June 2011. Its aim is to give an overview of production centres in the Central Mediterranean region by presenting images and descriptions of fabrics.

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### New book:



#### **Ceramics, Cuisine and Culture**

Michela Spataro and Alexandra Villing (Editors), ISBN: 9781782979470; Oxbow Books Publication, 2015, 304p, H279 x W215 (mm).

The 23 papers presented here are the product of the interdisciplinary exchange of ideas and approaches to the study of kitchen pottery in the Mediterranean region, from the Bronze Age to the Roman period. Using a range of social, economic and technological models aimed at unlocking the heuristic potential of this vital category of evidence, archaeologists, material scientists, historians and ethnoarchaeologists address the technical aspects of pottery production, cooking as socio-economic practice and changing tastes, culinary identities and cross-cultural encounters. The technical and social aspects of coarse ware have been a growing and contested field in scholarship of the last decade. The chapters in this volume contribute to this debate, moving kitchen pottery beyond the Binfordian 'technomic' category, linking processualism, ceramic-ecology, behavioural schools, and ethnoarchaeology to research on wider