COMMONWARE ROMAN POTTERY

FROM EXCAVATION TO DIGITAL FEATURES CLASSIFICATION

(a pilot project)

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Excavation
Field survey
Fineware potsherds from Interamna Lirenas (Central Italy)

- **Black-gloss:** produced locally
- **Terra sigillata:** from **Central Italy** (e.g. Etruria, Campania)
- **African Red Slip:** from **Northern Africa**
Fineware potsherds from Interamna Lirenas

Percentage distribution across time

- URBAN
- RURAL
Commonware potsherds from Interamna Lirenas

Percentage distribution across time

- URBAN
- RURAL
Rural settlement patterns around Interamna Lirenas

**WITH COARSEWARE**

**WITHOUT COARSEWARE**
Inside the library

series of pans with interior glaze-paint done in various shapes. They seem to have been imported.

A. KITCHEN WARE
   I. Saucepans

Class 1
This is a thick-walled, relatively deep pan. The lower section has not been preserved, so that reconstruction of the total shape is not possible. There is a shallow groove that separates the rim and wall. The piece has been exposed to fire.

Fig. 1
1. Rim and wall fragment. Granular, orange-brown clay with minute mica fragments. Inner surface brown. Outer surface brown with black patches. Medium-poor manufacture, MH 5.1 cm., Dia. 19.0 cm.

Class 2
The form of this piece is uncertain since only the rim and part of the handle are preserved. The and the bowl has a more elaborate projecting rim.

3. Fig. 1
Fragment of rim, wall and small portion of floor. Gray-black to tan clay with stone and minute mica particles. Surface tan with portions fire-blackened. Medium manufacture. MH 4.0 cm., Dia. 12.0 cm.

II. Round-Bottomed Pans

Class 1
This was a very broad-mouthed, probably relatively shallow pan. The rim projects outward and turns downward at the end. The inner portion of the upper wall points upward forming a separate lip, while a broad, shallow groove separates this section from the downward turned part. A small portion of an attached, flat piece on the upper surface of the rim is preserved. Perhaps this was part of an attachment for the handle.

4. Fig. 1
Fragment of rim and small portion of wall. Orange, slightly granular clay with gray-black stone

Cosa, the Utilitarian Pottery,
Workflow

FOR EACH SHAPE:

+ LABEL

+ LABEL
L. Seyler, Sean; Kumar, Avishek; Thorpe, M. F.; Beckstein, Oliver (2015): Comparison of Hausdorff and Fréchet distance. Two paths $P$ (green) and $Q$ (cyan) begin at state $c_0$ and end at state $c_f$ with directionality indicated by the arrows. PLOS Computational Biology. 

https://doi.org/10.1371/journal.pcbi.1004568.g001
Features Matrix and Confusion Matrix

**Neural classifier for multiple class data (DTU Denmark)**

3 classes, 2 layers

S. Sigurdsson et al., Outlier estimation and detection: Application to Skin Lesion Classification
The 27th Int. Conf. on Acoustic, Speech, and Signal Processing, pp. 1049-1052, 2002 Vol. 1
Thank you for your attention!