Rebuild broken amphoras in the Testaccio (II).

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Historical analysis: the Mount Testaccio.

The Testaccio is an artificial hill formed in the sub-Apuanian plain, almost one kilometer in perimeter and almost 50 meters high, formed by the remains of amphoras. About 85% came from the B缤tica (Antikythera) containing olive oil in the known as Drossen 20 type.

The high concentration of the same epigraphs makes us think about the existence of controlled outfalls. We believe that there should have been an administration of the mountain responsible for their maintenance and organization of the splash. The excavation of Mount Testaccio is particular, as there is no south or well-defined areas, but only amphora and more amphora where you can only excavate by creating an artificial system, which we have established by digging the terraces into 1m. square sections from which we extract the materials of 20 by 20 cm. Among our documents are titulus pictus with consular dating, we can establish, with the same stratigraphic position. In some cases we have been able to recognize the epigraphs set of an amphora. In some cases, less frequent, we have found or reconstituted fragments in which stamps and ritual pools have been attached. This is the ideal of our excavation, find fragments in which the information obtained through the titulus pictus thanks to its use with a stamp we can refer to the specific place from which the amphora was exported in the B缤tica, so we would get to encompass our information at a microarchitectural level.

To see the correlation between materials that we can not physically unite, we try to apply other methods, as is the case here. In this work we want to apply new methods to try to better relate our different materials in order to establish, through statistical methods, a better correlation between our materials.

The asymmetric index

The modified asymmetric index from A to B is defined as:

$$\Omega = \frac{1}{2} \sum_{i=1}^{n} (A_i - B_i)$$

where $A_i$ is the number of existing boxes and $B_i$ is the quantity of objects of the class A or B, where there are objects of the class B (or respectively A). In other words, when we are looking for an association of a certain level less A with a stamp B, SA corresponds to the number of total objects that have appeared, in the boxes where we have found the stamp B. NA is the number of total objects of the class A found in the excavation. QA is the quotient between the number of objects A in the box i and the total number of objects of both classes A and B in all the boxes where they coincide. QA, NS, and BS are defined similarly.

The following example shows the idea of this index. Let us consider an excavation where it has been found the object A and the object B in the following form:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

One can observe in this example that B is found with A, but A is not found always with B. In this case, QA = 10/11 and BS = 1 + BS + QA = 10/11. B coincides with A almost in its totality, for reaching that 100% it is necessary another object B in the left box placed at the top.

Proposal for Traceability of Figilina Virginsus (174, 176-179 AD)

The construction of an "inscriptional network" formed by stamps and ritual pools using the asymmetric index allows us, first, to visualize how the network correctly pairs the stamps of the same production area and that they could be on the same vessel. It also allows the construction of the Figilina Virginsus, ISVING, ISMILOF, KILIOF, etc. (2001) and ISVING, KILIOF, ISMILOF, etc. (2002) and second, with the help of the Titulae Beta could once be on these objects.

In this way, using this method we can propose several of these private agents linked to the marketing and distribution of olive oil amphoras produced in the Virgins: M. Carstoi Prasinos (2000, 2005), L. Calvani Sabini (2005), Antonian Nepari and Menonatori (2000), L. Anti Stipati Arnulphi Lupi (2005)...

References