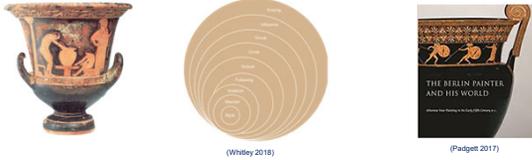


NETWORK VISUALIZATIONS OF BEAZLEY'S ABV AND ARV DATASETS: THE SHAPE SECTORS AND INFLUENTIAL ARTISANS IN ATHENIAN KERAMEIKOI

Eleni Hasaki and Diane Harris Cline

1. FROM MASTERS TO COMMUNITIES



(Whitley 2018)

(Padgett 2017)

The Social Networks of Athenian Potters Project (SNAP; snap.sbs.arizona.edu) set out to develop network visualizations of the Athenian potters' communities in the 6th-4th centuries BC as they were painstakingly identified by J.D. Beazley in the 20th century. Our goal was to expand the scholarly emphasis from the individual artisan to the wider community of practice within which they operated. Earlier studies and museum exhibitions had already paved the way for a more systematic studying of individual makers within their broader craft communities: "The Amasis Painter and His World" or most recently "The Berlin Painter and His World". In addition to grouping of individual practitioners (the main artistic personality linked to others through "manner, follower" etc), we aimed to connect all the "artists" in a much larger, interconnected, constellation of practice.

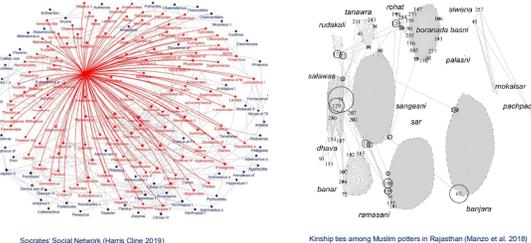
2. FROM LISTS TO NETWORKS

101 Onassis	Group E
102 Group E	Near Group E
103 Near Group E	Yakouf 145, Gr.
104 Near Group E	London 183, Gr.
105 Near Group E	Yakouf 145, Gr. P
106 Near Group E	London 183, Gr. P
107 Near Group E	Troxy White P.
108 Troxy White P.	Near Troxy White P.
109 Group E	Not far from Group E and Euboean
110 Group E	Not far from Group E and Euboean
111 Onassis	London 183, P
112 Onassis	London 183, P
113 Onassis	London 183, P
114 Onassis	London 183, P
115 Onassis	London 183, P
116 Onassis	London 183, P
117 Onassis	London 183, P
118 Onassis	London 183, P
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195 Onassis	London 183, P
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198 Onassis	London 183, P
199 Onassis	London 183, P
200 Onassis	London 183, P



The networks were bimodal, connecting artists to artists, but also artists to shapes. We converted the linear text by Beazley to a Social Network Analysis edge-list. The most common ties included:
 A. Artist to Shape (as per Beazley's chapter title, e.g., Amphora and Hydria Painters)
 B. Artist to Artist
 C. Artist to "Associates" (Near, Follower, Imitator, etc).
 We created thus a panoramic view of the craft communities, providing all the links that Beazley had identified. Some links, several pages apart or added later in the *Paralipomena*, were often hidden in these linear lists.

3. CHALLENGES



Sozates' Social Network (Harris Cline 2019)

Kinship ties among Muslim potters in Rajasthan (Manzo et al. 2018)

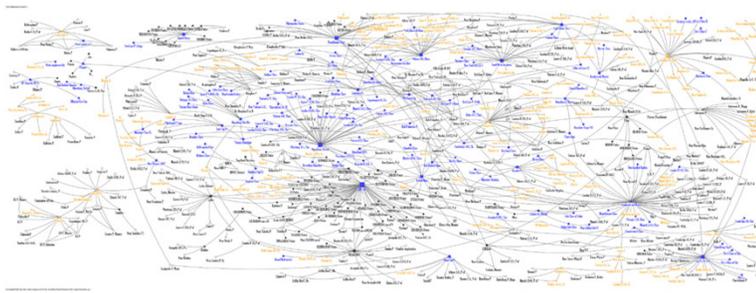
Connoisseurship-based networks look differently from those based on textual sources (e.g., Socrates or Alexander the Great) or the networks of contemporary potters' communities, whom the researchers can interview directly, gaining therefore an emic understanding of whom the potters themselves regard as "brokers" or influential agents in their communities. A SNA analysis of kinship ties and apprenticeship ties among potters of different religious groups in Rajasthan looks very different from the etic stylistic ties in classical scholarship. The long activity periods of Athenian potters/painters also posed challenges when creating time-slices, as their 40-50 yr activity years, while helpful for dating reasons, pose problems for sociograms which aim to show contemporaneous actors.

Select Bibliography and Acknowledgments

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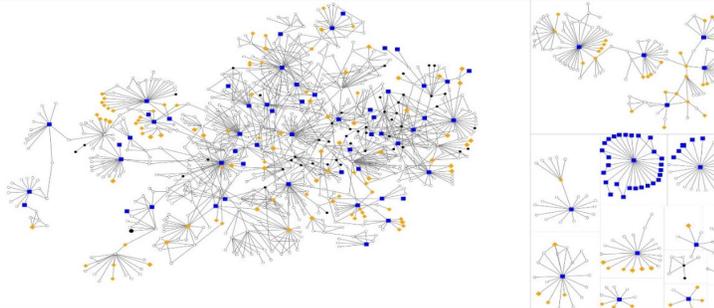
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4. THE ATTIC BLACK-FIGURE VASE-PAINTERS



Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley ABV and Para

5. THE ATTIC RED-FIGURE VASE-PAINTERS

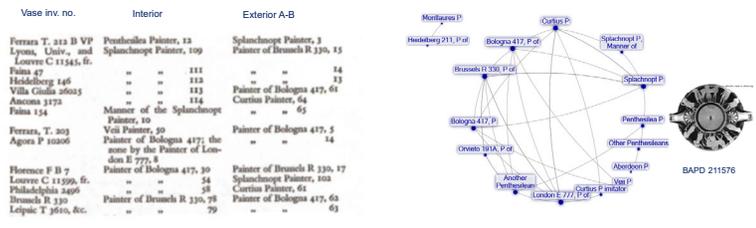


Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley ARV and Para

	Edges	Nodes	Named Artists	Attributed Artists	Groups	Classes
Black-Figure	866	701	79 (11%)	326 (47%)	169 (24%)	127 (18%)
Red-Figure	1888	1065	51 (5%)	765 (72%)	149 (14%)	100 (9%)

The basic metrics for ABV and ARV sociograms are presented in the table above. The ABV consisted of 12 components, and the largest one included 635 nodes. The ARV consisted of 13 components, and the largest one included 823 nodes. Named artists are indicated with solid circles; attributed with disks; groups with yellow diamonds; and blue squares for classes.

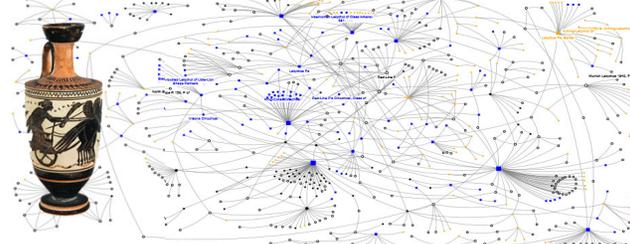
6. MACRO TO MICRO VISUALIZATIONS: THE PENTHESILEA WORKSHOP NETWORK



Sociogram credits: Visualization: D. Harris Cline and E. Hasaki; Data coding: E. Hasaki; Data: Beazley ARV

Beazley to show the collaborations in the red-figure Pentesilea workshop where we have instances of artists collaborating on the exterior highly-curved sides of a cup (sides A and B) and the interior rather flat tondo of the cup. With additional visual enrichment one can even insert the specific cups they worked on.

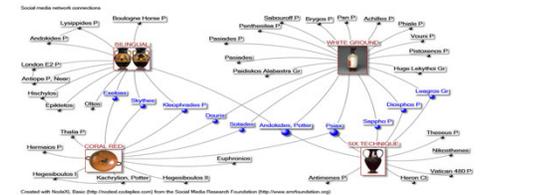
7. SHAPE SECTORS



Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley ABV and Para

Although Beazley and the connoisseurship method have been criticized for placing too much emphasis on the individual artists, Beazley had actually organized his books according to the shapes they decorated. The skills for a potter and painter producing a 18 cm tall drinking cup (kylix) with intense curvature are distinct from those for producing a 30 cm kylix with cylindrical body and almost no curvature. Lekythoi workshops must have been major players in the potters' quarters providing both stability and grounds for experimentation.

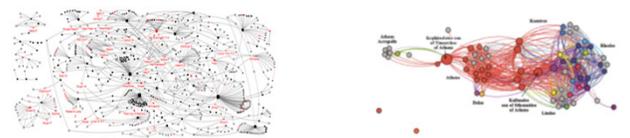
8. DIFFUSION OF INNOVATION



Sociogram credits: Data coding and visualization: E. Hasaki; Data: Cohen 2006

In addition to the main techniques of black-figure and red-figure, there was an intense experimentation with other techniques (Six, Coral Red, White-Ground) at the end of the Archaic period. A network visualization of their practitioners and their main shapes could shed light on which shape sectors (lekythoi, sympotic vessels?) could afford to innovate in these times and could provide new answers to why the red-figure technique prevailed.

9. NETWORKS OF MOBILITIES



Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley ABV and Para

Mobility and connectivity have been at the core of Social Network Analysis in Mediterranean studies. With potters and sculptors we can witness two different networks: mobility network for exported ceramics and of relocated sculptors Larson, using as data 493 inscriptions for 244 Hellenistic sculptors from the Aegean, highlighted their patterns of mobility and interaction. Beazley constructed his communities of specialists by studying exported Athenian vases. With the exception of a large number of lekythoi, very little of the material included in the ABV and ARV comes from contexts in Athens itself. The resulted sociograms highlight those exporters.

10. FUTURE GOALS



The creation of the sociograms was the first step of a lengthy process of refining them, adding more layers, reducing the activity years to more realistic spans for constructing time-slices, and integrating the sociograms with the Beazley Archive Pottery Database. Once integrated, scholars can inquire the database for linked artists regarding distribution patterns, iconographical choices, trademark associations, and much more. A recent study of Network Analysis of shared iconography among 17th century Dutch painters opens up new vistas for networked iconographical analysis in classical vase-painting.