

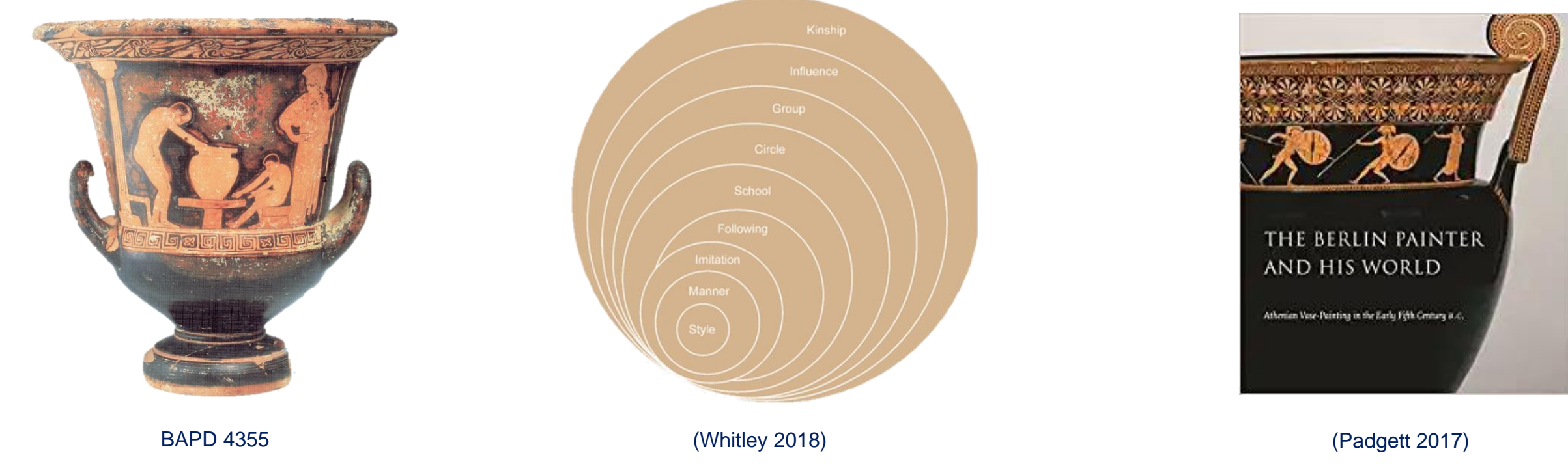


NETWORK VISUALIZATIONS OF BEAZLEY'S ABV AND ARV DATASETS: THE SHAPE SECTORS AND INFLUENTIAL ARTISANS IN THE ATHENIAN KERAMEIKOI

Eleni Hasaki and Diane Harris Cline



1. FROM MASTERS TO COMMUNITIES OF PRACTICE

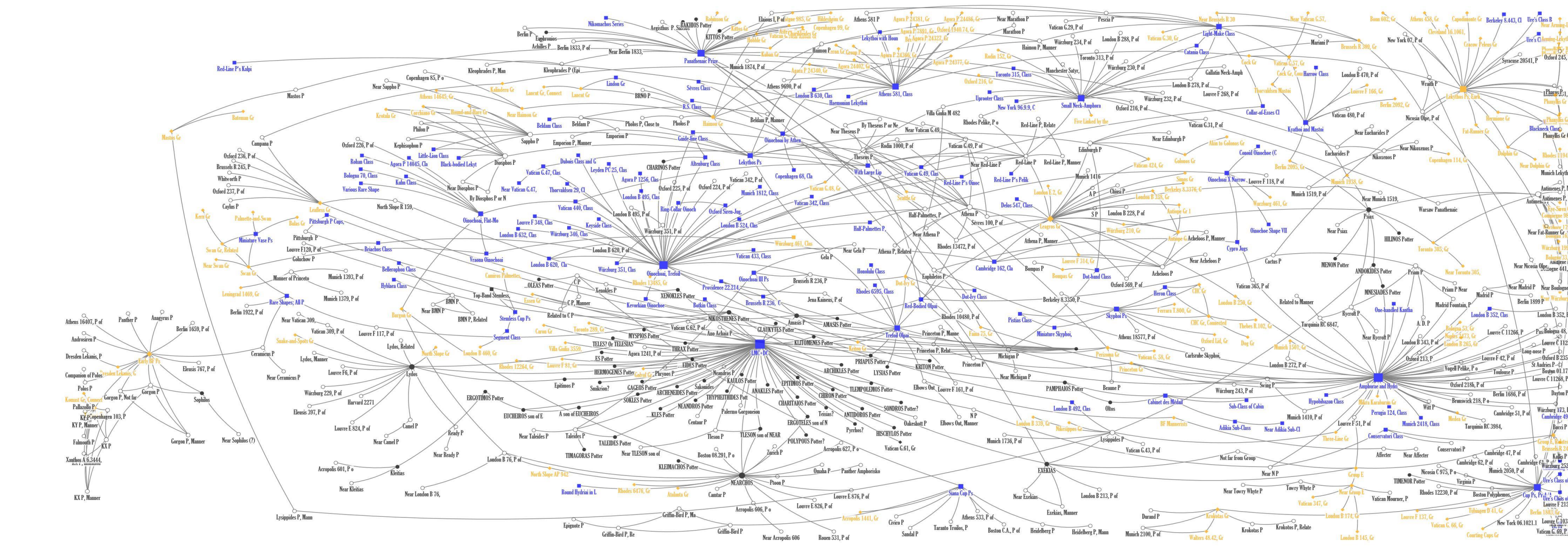


The Social Networks of Athenian Potters project (SNAP; snap.sbs.arizona.edu) set out to develop network visualizations of the Athenian potters' communities in the 6th-4th centuries BCE as they were painstakingly identified by J.D. Beazley in the 20th century CE in his *ABV*, *ARV*, and *Paralipomena* volumes. Our goal is 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 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 groupings centered around individual practitioners (the main artist linked to others through "manner", "follower" and similar relational ties), we aim to connect all the artists in much larger, interconnected, constellations of practice.

2. FROM LISTS TO NETWORKS

Nodes	Edges	Named Artists	Attributed Artists	Groups	Classes	
Black-Figure	701	866	80 (11%)	326 (47%)	168 (24%)	127 (18%)
Red-Figure	1065	1588	51 (5%)	765 (72%)	149 (14%)	100 (9%)

4. THE ATTIC BLACK-FIGURE VASE-PAINTERS

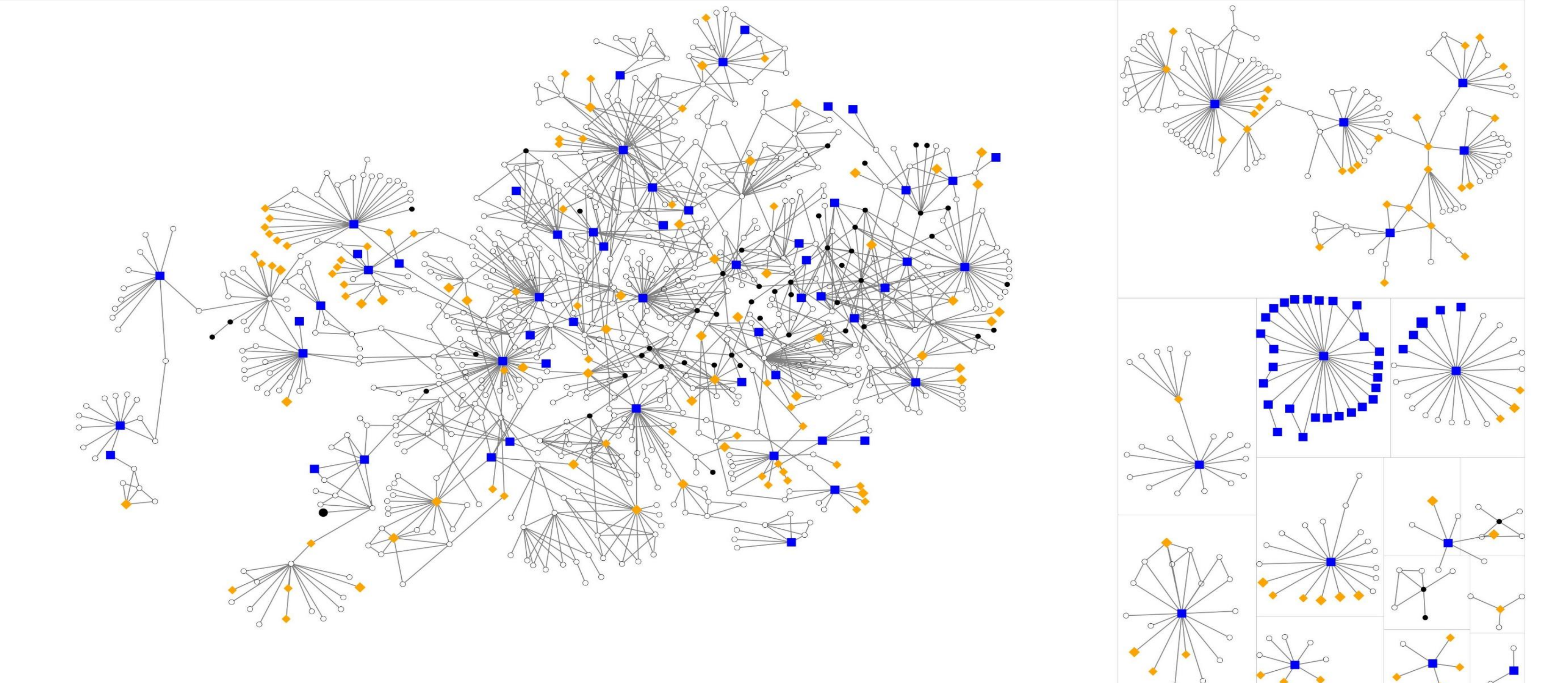


Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley *ABV* and *Para* (Harris Cline and Hasaki 2019; Hasaki and Harris Cline 2020)

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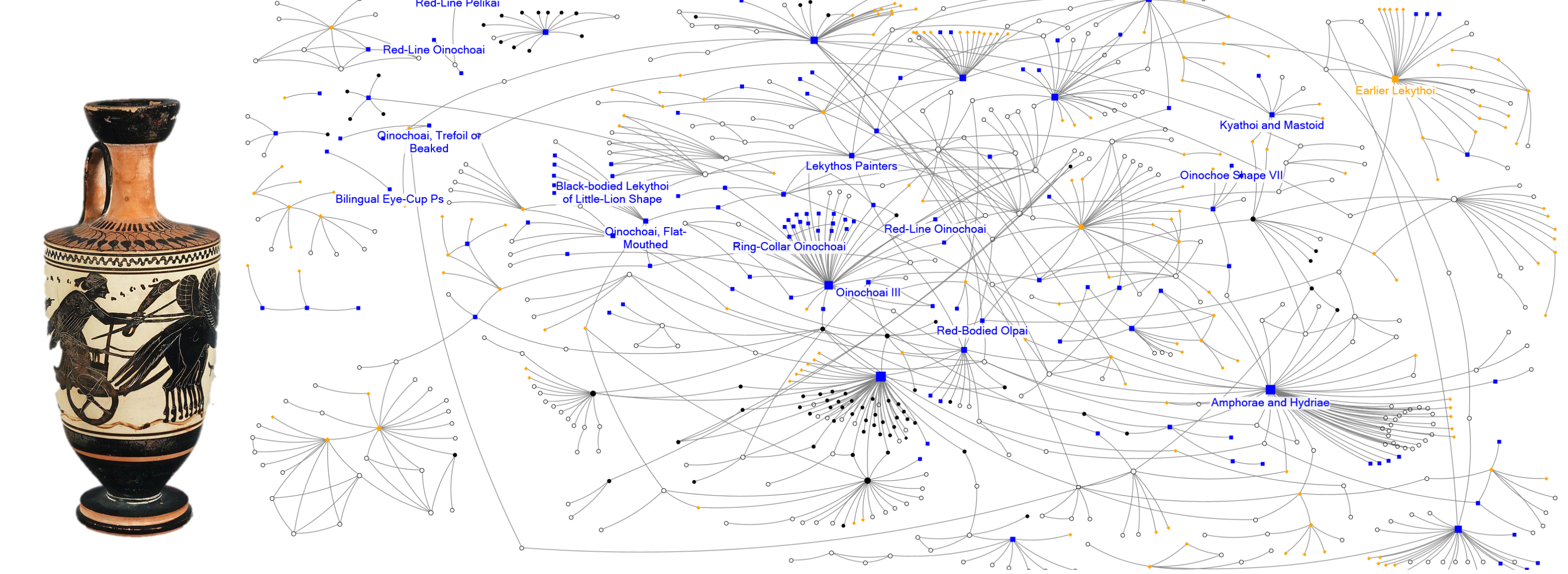
The basic metrics for *ABV* and *ARV* sociograms are presented in the table above. The *ABV* consists of 12 components, and the largest one includes 635 nodes. The *ARV* consisted of 13 components, and the largest one includes 823 nodes.

5. THE ATTIC RED-FIGURE VASE-PAINTERS



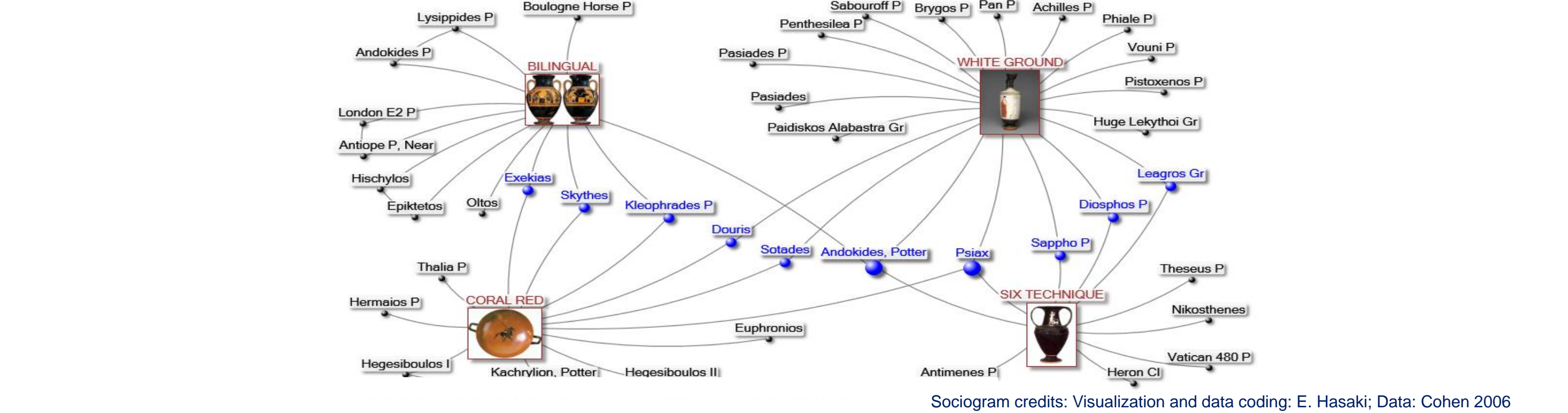
Sociogram credits: Visualization: D. Harris Cline; Data coding: E. Hasaki; Data: Beazley *ARV* and *Para*

7. SHAPE SECTORS



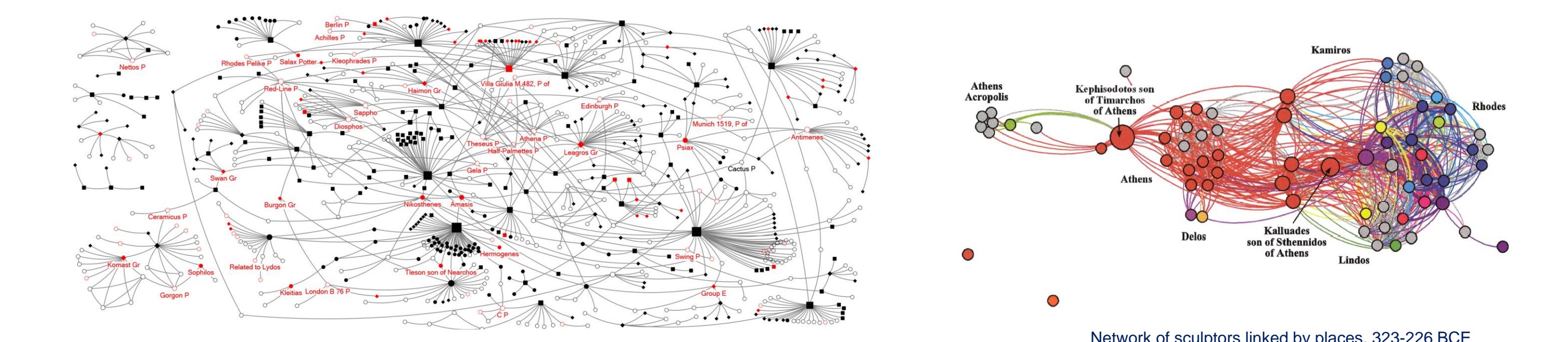
Although Beazley and the connoisseurship method have been criticized for placing too much emphasis on the individual artists, Beazley had organized his books according to the shapes the Athenian vase-painters decorated. The skills required for a potter and painter to produce an 18 cm kylix with intense curvature are distinct from those for producing a 30 cm lekythos with cylindrical body and almost no curvature on the walls. Lekythoi workshops must have been major players in the potters' quarters providing both stability and opportunities for experimentation.

8. DIFFUSION OF INNOVATION



At the end of the Archaic period, vase-painters experimented intensively with other techniques (Six, Coral Red, White-Ground) in addition to the main techniques of black-figure and red-figure. A network visualization of their practitioners and their main shapes could shed light on which shape sectors (e.g., lekythoi, sympotic vessels) could afford to innovate with new techniques and could provide new insights as to why the red-figure technique prevailed.

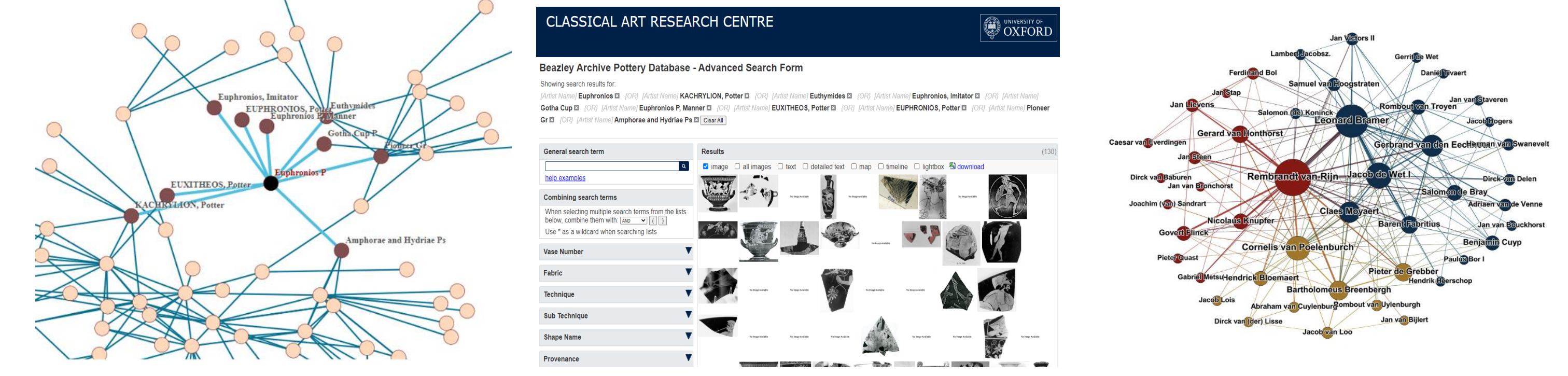
9. NETWORKS OF MOBILITIES



Network of sculptors linked by places, 323-226 BCE (Larson 2013)

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 used 493 inscriptions for 244 Hellenistic sculptors from the Aegean to highlight their patterns of mobility and interaction. Beazley constructed his communities of specialists by studying exported Athenian vases. Except for lekythoi, very few vases in the *ABV* and *ARV* come from local, Athenian, contexts. The resulted sociograms highlight those artisans involved in the export trade.

10. FUTURE GOALS



Experimental configurations of integrating sociograms with BAPD and performing searches of linked artists (G. Parker) (interactive page: <https://www.carc.ox.ac.uk/xdb/asp/testSNAas.htm>)

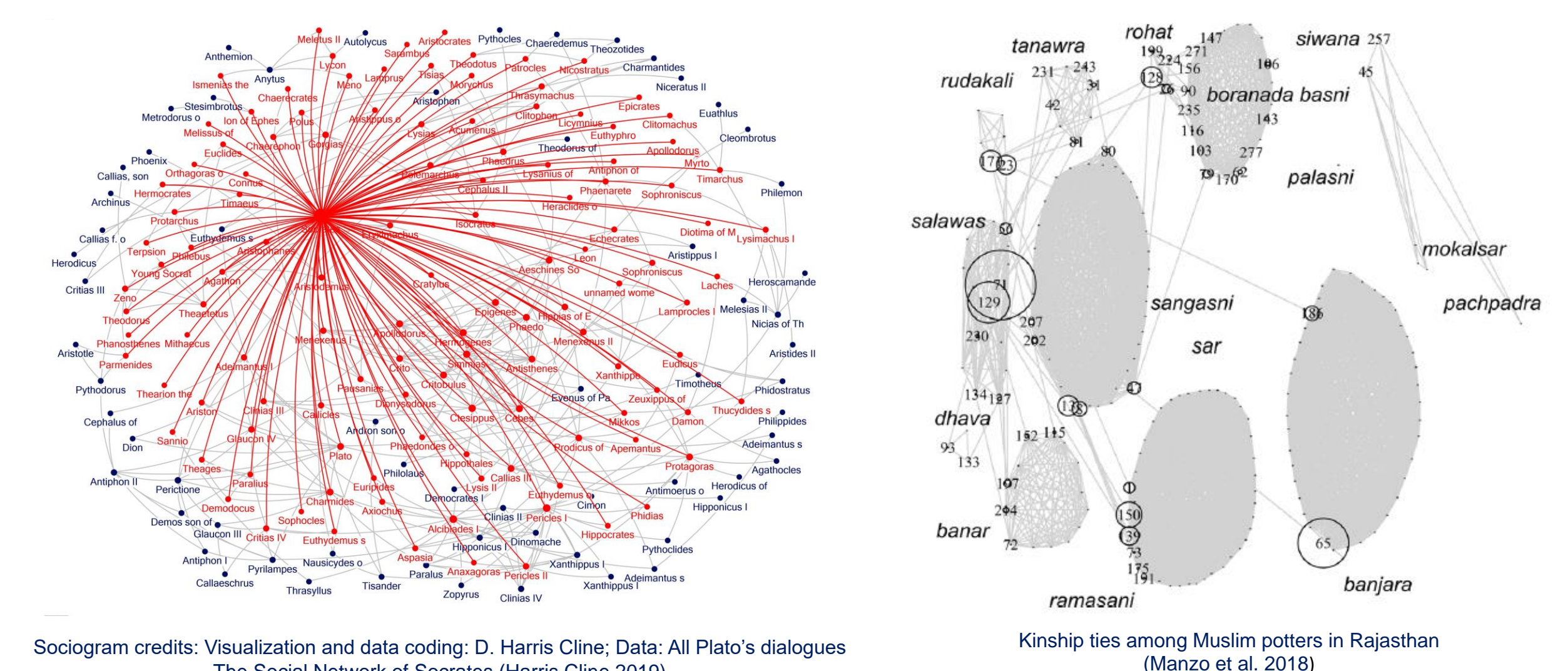
The creation of the sociograms is the first step of a lengthy process of refining them, adding more layers, reducing the activity years to more realistic spans for constructing time-slices, and integrating the sociograms with the Beazley Archive Pottery Database. Once integrated, scholars can inquire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

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:

- i. Artist to Shape (as per Beazley's chapter title, e.g., amphorae and hydriae painters)
- ii. Artist to Artist
- iii. Artist to "Associates" (e.g., near, manner, follower, imitator)

We created thus a panoramic view of the craft communities, providing all the links that Beazley had identified. Some connections remained somewhat hidden in these linear lists, as they were noted in different parts of the volumes or added later in the *Paralipomena*.

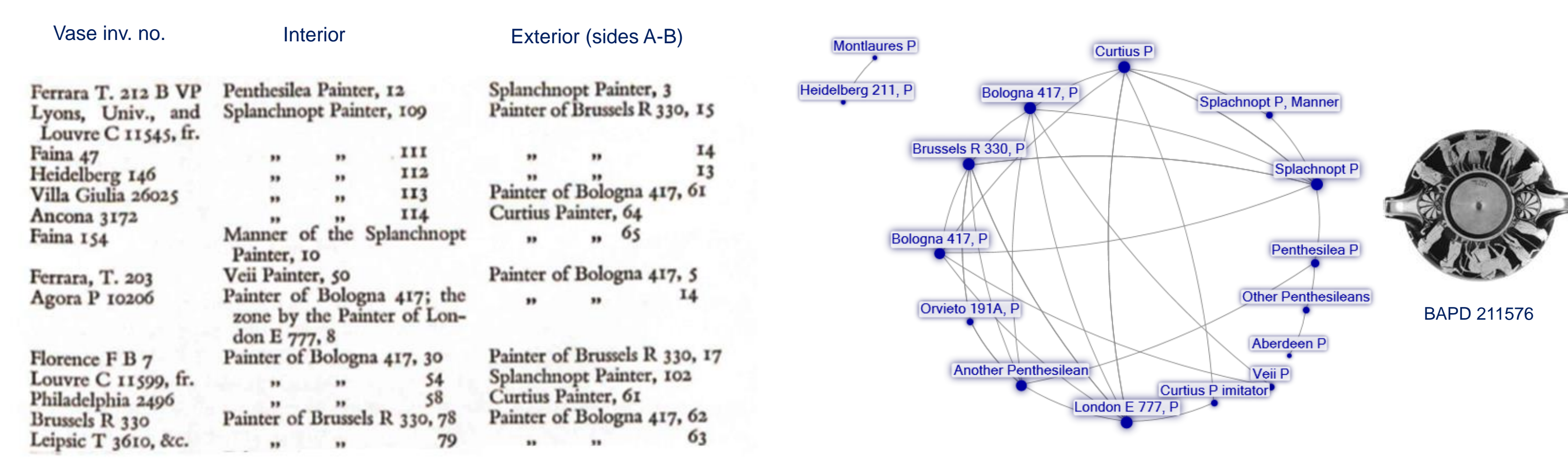
3. CHALLENGES



Sociogram credits: Visualization and data coding: D. Harris Cline; Data: All Plato's dialogues (Marzouk et al. 2018)

First, 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. Second, the long activity periods of Athenian potters/painters also posed challenges when creating time-slices, as their 40-50 years of assumed activity, while helpful for dating reasons, pose problems for sociograms which aim to show contemporaneous actors. Finally, better integration is needed for the period 525-475 BCE which is covered in both *ABV* and *ARV*.

6. MACRO TO MICRO VISUALIZATIONS: THE PENTHESILEA WORKSHOP NETWORK



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

Network analysis can greatly facilitate the visualizations of artistic collaborations. In his *ARV* Beazley listed the collaborations of artists in the Pentesilea workshop where red-figure artists who decorated the exterior, sides of a cup (sides A and B) collaborated with artists decorating the interior tondo of the cup. The sociograms can be further enhanced when linked to photographs in the BAPD so the researchers can see simultaneously the collaborators and the specific cups.

Select Bibliography and Acknowledgments

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