

Facebook-ing Vergil's *Aeneid*: Social Network Analysis of a Classic

Though social network analysis techniques had already been applied to Cicero's *Epistulae* and a corpus of Ancient Greek tragedy, this type of analysis truly garnered public attention after the publication of Pádraig Mac Carron and Ralph Kenna's article, "Universal Properties of Mythological Networks" (Alexander and Dankowski, 1990; Ryberg-Cox, 2011; Pádraig and Kenna, 2012). This article claimed to have discovered new evidence, supporting the plausibility of Homer's *Iliad*. This claim was backed not by archaeological evidence but by literary evidence as they analyzed the *Iliad's* social networks, i.e., the social relations between the set of characters, to re-examine this well-studied text (Barabási and Márton Pósfai, 2016). Their calculations suggested that the relationships in the *Iliad* mirrored real world relationships and thus provided further evidence of the historical foundations. While extensive attention has since been paid to Homer's *Odyssey* and, again, to his *Iliad*, Vergil's *Aeneid* has, unfortunately, been left to the wayside (Miranda, Baptista, and de Souza Pinto, 2013; Kydros, Notopoulos, and Exarchos, 2015).

In this paper, I develop four different social networks from Vergil's *Aeneid*. Static and dynamic conversational networks examine relationships between characters based on dialogue. Static and dynamic co-occurrence networks examine relationships based on the simultaneous appearance of two characters in a scene. The static networks provide a look at the *Aeneid* in its entirety. The dynamic networks look at the individual books of the *Aeneid* and the various roles that a character may play at different points in the narrative. This paper is unique in its study of such a variety of networks as it allows for all types of interactions to be taken into account and for the networks to paint a fuller picture of the relationships in the *Aeneid*. Through the distant reading facilitated by the mathematical calculations and the visualizations and the close reading

of scholars such as Gilbert Highet, I argue that a more holistic reading of the *Aeneid* can be derived (Highet, 1972). By calculating various social analysis metrics such as the average degree of each character as well as their closeness and betweenness centralities and by presenting the visualizations of their social networks, I present an analysis of the ever-changing roles of characters throughout the *Aeneid* with a focus on how such quantitative methods can specifically illuminate the roles of comparatively minor characters such as Ilioneus and Achates.

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