

Collective Identity Formation Through Personal Networks and Semantic Expression: Forging the English Ruling Class 1660 - 1714

Background

Seventeenth-century England was wracked by a ferocious civil war, religious fanaticism, and political hatreds that would not yield to reason; yet by the middle of the eighteenth century it had achieved adamant political stability. In the more than fifty years since the publication of J. H. Plumb's "The Growth of Political Stability in England 1675–1725", scholars have debated the relative roles of political institutions and social processes in causing this transformation (Plumb, 1967). A crucial issue is the origin and timing of one of Plumb's three major factors driving English political stability: "a sense of common identity in those who wielded economic, social and political power". This raises a key question: did English political institutions in the early eighteenth century exogenously induce a sense of common elite identity congenial to political stability, or had this sense already emerged organically during the late seventeenth century? This paper employs and extends contemporary historical network analysis methods to evaluate this question (Burgdorf & Hillmann, 2021; Ryan & Ahnert, 2021).

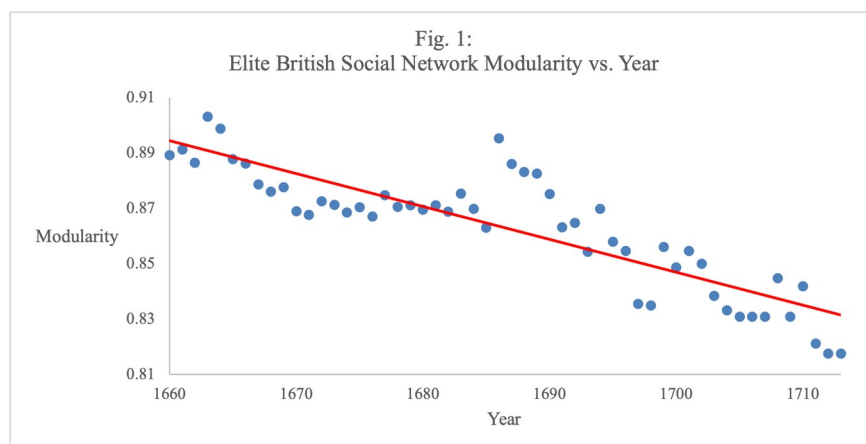
Data and Methods

Social links with start and end dates for approximately 13,000 prominent early modern Britons were collected from the Six Degrees of Francis Bacon website. These were used to create a social network model for each year 1660 - 1714. Modularity was calculated for each annual network, and the evolution of modularity was evaluated over this period. Two robustness checks were conducted on the identified trend. First, recognizing that any early modern network representation may miss important human connections that had actually existed, a bootstrapping

analysis was executed that randomly removed identified links and then measured the impact of removing this data on the estimated trend. Second, an independent analysis of the evolution of elite social network modularity was undertaken by building social networks for the periods 1660 - 1688 and 1689 - 1714 using author-addressee metadata for 4,866 letters collected from the Early Modern Letters Online (EMLO) database. To assess changes in the content of elite discourse, full text was collected for 15,410 English books published between 1660 and 1700 from the EarlyPrint website. Natural language processing (NLP) methods were used to evaluate the religiosity and emotionality of each text based on word choice, and the evolution of these characteristics was evaluated over this period.

Findings

Modularity of the social network of prominent Britons declined from approximately 0.89 in 1660 to approximately 0.82 in 1714. This data and the ordinary least-squares regression trendline are shown in Fig. 1.



This analysis is sensitive enough to detect temporary re-fractionalization at the time of the Glorious Revolution. The trend is statistically significant ($p < 0.01$) and is robust to randomized

deletion of up to fifty percent of network links. In the independent analysis of EMLO author-addressee networks, modularity declined from 0.76 in 1660 – 1688 to 0.71 in 1689 – 1714 ($p < 0.01$), corroborating the result of declining elite modularity. NLP analysis of English books detected statistically significant declining trends for both religiosity ($p < 0.01$) and emotion ($p = 0.04$). The typical English book of 1700 was significantly less religious and less emotional than one published in 1660. In summary, England forged an elite culture that grew increasingly unified, secular, and rational over the course of the later Stuart period.

References

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