Countering counterfeiters: The Mittheilungen des Museen-Verbandes and forgery networks in the 20th century

Keywords: art forgery; counterfeiting detection; historical networks; multilayer networks; cultural heritage

Extended Abstract

The persistent vulnerability of the global art market to sophisticated forgery underscores the critical need for effective defense mechanisms. Contemporary initiatives often struggle with fragmentation and access limitations, highlighting the need for robust and collaborative models. Our research aims to address this through a quantitative analysis of a pioneering historical system: the "International Association of Museum Workers in Defense Against Counterfeiting and Improper Trade Practices."

The association, founded in 1898 and with approximately 500 members in its last year of existence when the Second World War broke out in 1939, had a highly secretive nature. It published the so-called "Mitteilungen des Museen-Verbandes" (Communications of the Museum Association, 1899–1939), whose editions had a clear directive for confidentiality and discretion in their prologue: "[The members] furthermore commit, in the event of their departure from the association, to return all printed materials to the executive committee, as well as to ensure that, in the event of their death, the printed materials are returned to the executive committee." For its time, the association was highly international, with representation from the German Reich, as well as Denmark, France, Great Britain, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland, and the USA. In the individual editions of the "Mitteilungen," members informed each other about current forgery cases and workshops. Some works were later rehabilitated by the exhibiting museums, others were banished to storage, or remained in the display collections, where they are once again mistakenly cataloged as originals today [1].

Our approach is to use these rich and complex historical data to reconstruct networks related to the experts (members of the association) and the counterfeiters (exposed by them). For that, we create multilayer, multiplex networks, with the several types of entities – people, artwork, institutions, events, sources – and links (e.g, ownership, participation, authorship) present in the data. Additionally, for targeted analysis, we reduce the dimensionality of the data and create bipartite networks and their projections (Fig. 1) that are compatible with more traditional analysis, such as revealing the mechanism of network formation [2, 3] and the critical role of central actors and institutions that could potentially promote forgery activities [4, 5].

In this proposed contribution, we focus on discussing the challenges of approaching these historical data from the perspective of networks and the different ways in which we model them. Rather than providing final conclusions, we present the use of network modeling and analysis to guide and provide the means necessary for further archival and historical research. A key ethical consideration is the potential impact on the current art market and the provenance of works. Although our study analyzes historical networks, its findings could have a direct impact on collections and exhibition today.

References

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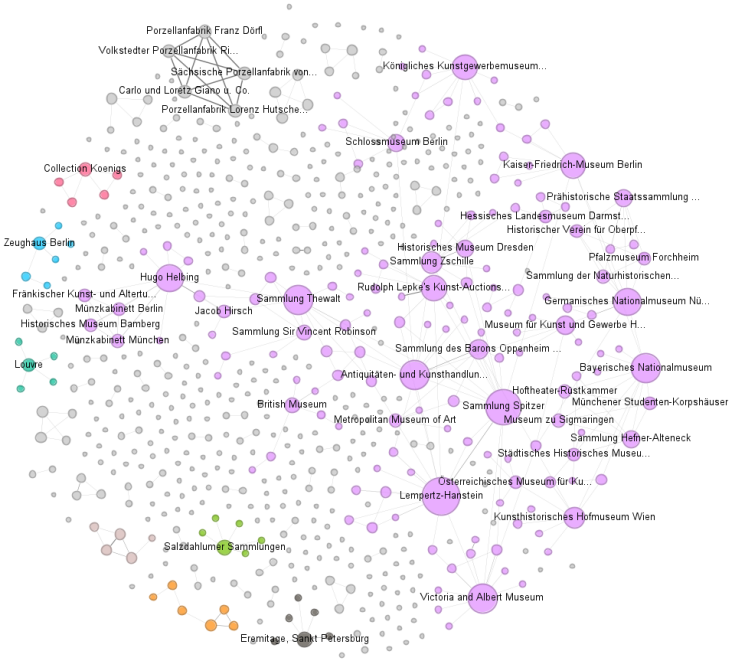

Figure 1: **Institutions.** A one-mode projection of an institution-artwork bipartite network onto the institution node type. In this projection, institutions are connected if they are associated with the same artwork (even across different time periods). Node size is proportional to degree, and color represents the inferred community structure. Although some highly connected institutions are (unsurprisingly) auction houses and art dealers, several collections also exhibit high degree, raising new questions and driving further archival research.