## Philanthropy in Art: Locality, Donor Retention, and Prestige

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Art and cultural institutions in the US require considerable resources. While most institutions operate on limited budgets, a select few raise hundreds of millions of dollars in operating expenses to fulfill their missions. While revenue can come from federal and state governments, and can be earned from sales, for most US art organizations philanthropic contributions are the primary source for funding. For example, in 2018 the Metropolitan Museum of Art reported receiving over \$250M and the Museum of Fine Arts in Boston reported over \$60M in philanthropic support, representing 48% and 45% of their respective total revenue.

The recent availability of the IRS 990 e-file dataset, containing tax returns of all US nonprofit organizations submitting electronically, offers an unprecedented level of detail on the activity of both funders and recipients. Our analysis of 3.6 million tax returns from the IRS e-file dataset helps us offer an unusually comprehensive picture of the patterns that characterize support for art. We identified 10,338,779 grants listed on tax forms and reduced the data to recipient organizations under the category of 'Arts, Culture, and Humanities', allowing us to identify 149,291 art organizations.

We then constructed the network of donors and the art recipients they support. In Fig. 1 we show a subset of the data, capturing grants to art recipients in New York City (NYC). The network shows 144 recipients and 246 donors connected via 552 grant relationships that involved a total of over \$1M over the past decade and represents the core of New York City art institutions and the major donors supporting them.

Overall, we find that art funding is broadly distributed with a long-tail as some institutions raise considerably more funds than others. Furthermore, art funding is highly local, with over 60% of dollars being given to institutions in the same state as the donor. We also find that art institutions within the same geographical area share the same funders, largely independent of the artistic experiences they offer, e.g., visual or performing arts. Third, we observe strong donor retention, finding that funders who support institutions for multiple years are increasingly likely to continue their support. Finally, we offer a case study of art museums, finding that funding

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levels correlate with institutional prestige, with notable exceptions for institutions that engage a unique and captive donor base.

Our findings provide insights on the social consumption and support of art in the US and demonstrate how large open datasets can help us understand who is supporting art. Further work should explore art funding in an international context including both how US funders at times support non-US recipients, and how governments and philanthropy support art in other regions around the world.



Fig. 1- **The art philanthropy network.** Yellow nodes represent art recipients with a New York City address and purple nodes are donors to those institutions (some of whom may be outside New York). Links show funds given by a donor to a recipient and the width of each link is proportional to the amount of the donation. A core set of donors in the center, including donor advised funds, the Ford Foundation and the Mellon Foundation support multiple art recipients, while other donors in the periphery tend to support a single art recipient. Only donor-recipient relationships involving a total over \$1M for the decade are shown.



**Fig. 2. Donor overlap in art. (a)** Nodes represent institutions and links represent shared donors. We limit the nodes to organizations receiving funds from at least 50 distinct donors and a total of \$10M over the decade. Link widths reflect the Jaccard of the set of donors to each institution. Only links with Jaccard weight above 0.1 are shown. Institutions in the same city tend to have high donor overlap even when offering distinct experiences. At the same time, there are very few links across the nation, indicating that institutions with similar artistic offerings in different geographic regions rarely share donors. We show closeups on the regions of (b) San Francisco and (c) New York.