Institutionalizing Knowledge in Washington's Early Republic

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Institutionalizing Knowledge in Washington D.C. and the Early Republic

a test case using visualization strategies

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Research Interests

• Organization, Diffusion of Knowledge
  • What
  • Who
Laying the Corner-Stone

Smithsonian Institute


George M. Dallas daguerreotype portrait, 1848
Historical Society of Pennsylvania
Civil Societies

“Americans of all ages, of all conditions, of all minds, constantly unite…” in order to “create hospitals, prisons, schools…” and “bringing a truth to light or of developing a sentiment with the support of a good example, they associate.”
<table>
<thead>
<tr>
<th>Name</th>
<th>Date Established</th>
<th>State</th>
<th>City</th>
<th>Type of Soc.</th>
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DC Organizations

1. Columbian Agricultural Society
2. Metropolitan Club
3. Columbian Institute for the Promotion of Arts and Sciences
4. Medical Society of the District of Columbia
5. Enosinian Society –Columbian College
6. Washington Relief Society 1830
7. Female Union Benevolent Society of Washington City
8. Washington Monument Society
9. Washington Literary Society
10. Washington Library Company
11. Washington Female Orphan Society
12. Washington Orphan Asylum
13. Washington Botanical Society
14. Washington Bible Society
15. Washington Benevolent Society of Young Men
16. Washington Art League
17. Washington Art Association
18. Columbia Typographical Society
19. Washington area International Order of Odd Fellows
20. National Institution (Institute) for the Promotion of Science
21. Mechanics Institute
22. Consumers Protective Association
23. Columbian Institution for the Deaf, Dumb and Blind
24. Columbian Hospital for Women and Lying in Asylum
25. American Tract Society
26. American Colonization Society
Specialization

- It is tempting to view science and scientific organizations as a unifying force for progress. Creating national unity spurred on by specialized institutions, creating a progressively advancing state of knowledge for humanity.

- Diversity of organizations promote connections or silo conversations?
Questions-Presumptions

• Do organizations privilege knowledge based on interests of members?

• Did the increase in the number and variety of societies promote diffusion and heterogeneous interests rather than binding groups together through singular designs?

• Are there significant shared memberships between organizations?

• Typically, scholars examine one group, or set of groups at a time. As such, historians of science frame their understanding within the context of scientific discourse while historians of religion, or politics each focus on their own niche. Therefore examining the makeup of multiple institutions across disciplinary barriers offers an opportunity to explore a larger proportion of the community in the early American republic.
• Visualizations, like network graphs that can show the connections and distinctions between the members of different associations could become a valuable tool.
• Graphing data gleaned from memberships can help use old sources in effective ways.
• American Philosophical Society [http://www.amphilsoc.org/members]
• American Academy of Arts and Sciences [https://www.amacad.org/contentu.aspx?d=941]
data

Name: Thomas Bacon
Year Elected: 1768
Residency: Resident
Living?: Deceased
Death Date: 5/24/1768

Name: Lynford Lardner
Year Elected: 1768
Residency: Resident
Living?: Deceased
Birth Date: 1715
Death Date: 10/6/1774

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group_by(Year.Elected, Organization) %>
%>
summarize(n = n()) %>%
ggplot(aes(x=Year.Elected, y= n, color = Organization )) +
geom_smooth() +
ggtitle("Annual Elected Members of APS, AAAS, and ANS") + ylab("Total Members Elected") + xlab("Year Elected")
Network Analysis

- 7,298 Names
- 14 groups
- Usually Offers opportunities for new or focused questions instead of answers
Sample Early American Societies

- Columbian Agricultural Society
- Medical Society of the District of Columbia
- Columbian Institute for the Promotion of Arts and Sciences
- National Institute for the Promotion of Science
- Academy of Natural Sciences
- American Association for the Advancement of Science
- American Philosophical Society
- American Academy of Arts and Sciences
- United States Military Philosophical Society
- Baptist General Convention
- 1841 Federal Government
- 1816 Army
- 1822 Army
- 1822 Federal Government
Future Work

- Add nuance to membership data
- Publication Data
- Organizational Directories
- Other Societies
  - Odd Fellows
  - Volunteer Association
  - Temperance Societies
Thank You!

- Lincoln Mullen
- Theresa Calcagno
- John Zenelis and Diane Smith
- CLIO3 Class
- Zachary Schrag
- Rosemarie Zagarri
• George Mifflin Dallas, *Address Delivered on Occasion of Laying the Corner Stone of the Smithsonian Institution, May 1, 1847*. (Washington, Printed at the Office of Blair and Rives, 1847)


Citations 2


Citations 3


• Hadley Wickham, *Advanced R*, The R Series (Boca Raton, FL: CRC Press, 2015);


Once the data is prepared as structured data file like in a .csv file there are several tools that are helpful to utilize. RStudio is a free and open source tool designed to work with the programming language called R that was designed for statistical computing and graphics. This tool allows users to easily load packages that make it possible to use the R programming language. The packages that are utilized in RStudio like ggplot2 and igraph allow the scholar to pass the data collected from the membership lists through and develop graphic outputs based on the need. For example, the package igraph is designed to create and manipulate graphs and analyze networks. This is a core tool in the study of network science, which relies on the identification of nodes and their connections called edges.
Questions or Ideas for Improvement-This is a work in progress