

Making new discoveries from old data

Utilizing digital scholarship to foster new research in
special collections

Slides: goo.gl/smvkvf

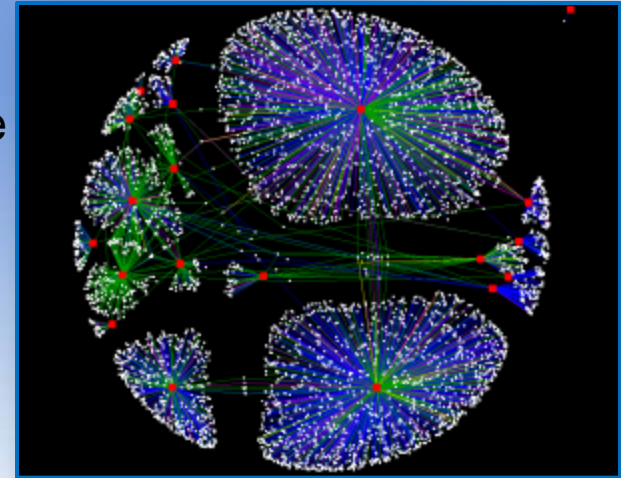
Goals

1. Explore using digital scholarship methods and tools to enhance user experience in special collections and potentially provide new services.
2. Develop a pilot project as a proof of concept for a new service.
 - Utilize existing open source technologies.
 - Little to no need for dedicated IT support.

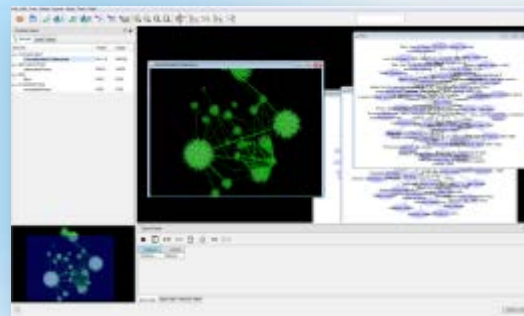
Result

Provide visualization on demand, customized to a patron's individual research question.

- Use data from finding aids and publicly accessible databases along with open-source tools to create interactive visualizations of social networks of the creators of our archival collections.
- Make connections between entities more apparent and provide a discovery tool to spur further inquiry and research.



```
1000  
1001  
1002  
1003  
1004  
1005  
1006  
1007  
1008  
1009  
1010  
1011  
1012  
1013  
1014  
1015  
1016  
1017  
1018  
1019  
1020  
1021  
1022  
1023  
1024  
1025  
1026  
1027  
1028  
1029  
1030  
1031  
1032  
1033  
1034  
1035  
1036  
1037  
1038  
1039  
1040  
1041  
1042  
1043  
1044  
1045  
1046  
1047  
1048  
1049  
1050  
1051  
1052  
1053  
1054  
1055  
1056  
1057  
1058  
1059  
1060  
1061  
1062  
1063  
1064  
1065  
1066  
1067  
1068  
1069  
1070  
1071  
1072  
1073  
1074  
1075  
1076  
1077  
1078  
1079  
1080  
1081  
1082  
1083  
1084  
1085  
1086  
1087  
1088  
1089  
1090  
1091  
1092  
1093  
1094  
1095  
1096  
1097  
1098  
1099  
1100  
1101  
1102  
1103  
1104  
1105  
1106  
1107  
1108  
1109  
1110  
1111  
1112  
1113  
1114  
1115  
1116  
1117  
1118  
1119  
1120  
1121  
1122  
1123  
1124  
1125  
1126  
1127  
1128  
1129  
1130  
1131  
1132  
1133  
1134  
1135  
1136  
1137  
1138  
1139  
1140  
1141  
1142  
1143  
1144  
1145  
1146  
1147  
1148  
1149  
1150  
1151  
1152  
1153  
1154  
1155  
1156  
1157  
1158  
1159  
1160  
1161  
1162  
1163  
1164  
1165  
1166  
1167  
1168  
1169  
1170  
1171  
1172  
1173  
1174  
1175  
1176  
1177  
1178  
1179  
1180  
1181  
1182  
1183  
1184  
1185  
1186  
1187  
1188  
1189  
1190  
1191  
1192  
1193  
1194  
1195  
1196  
1197  
1198  
1199  
1200
```



Data Processing: Tools

EAC-CPF record creation:

Social Networks and Archival Context

<http://socialarchive.iath.virginia.edu/snac/search>

Remixing Archival Metadata Project

<http://rampeditor.info>

xEAC

<https://github.com/ewg118/xEAC>

More Data Processing

Information extracted:

- Name of connection
- Type of entity
- Type of connection
- Link to more information (when available)

```
<cpfRelation
  xlink:arcrole="http://socialarchive.iath.virginia.edu/control/term#associatedWith"
  xlink:href="http://n2t.net/ark:/99166/w6f48mrk"
  xlink:role="http://socialarchive.iath.virginia.edu/control/term#Person"
  xlink:type="simple" xmlns:xlink="http://www.w3.org/1999/xlink">
  <relationEntry>Zirlin, Larry.</relationEntry>
</cpfRelation>
```

More Data Processing

Information extracted:

- Name of connection
- Type of entity
- Type of connection
- Link to more information (when available)

```
<cpfRelation
  xlink:arcrole="http://socialarchive.iath.virginia.edu/control/term#associatedWith"
  xlink:href="http://n2t.net/ark:/99166/w6f48mrk"
  xlink:role="http://socialarchive.iath.virginia.edu/control/term#Person"
  xlink:type="simple" xmlns:xlink="http://www.w3.org/1999/xlink">
  <relationEntry>Zirlin, Larry.</relationEntry>
</cpfRelation>
```


More Data Processing

Information extracted:

- Name of connection
- **Type of entity**
- Type of connection
- Link to more information (when available)

Entity types:

- Person
- Corporate Body
- Family
- Archival Resource
- Bibliographic Resource

```
<cpfRelation
  xlink:arcrole="http://socialarchive.iath.virginia.edu/control/term#associatedWith"
  xlink:href="http://n2t.net/ark:/99166/w6f48mrk"
  xlink:role="http://socialarchive.iath.virginia.edu/control/term#Person"
  xlink:type="simple" xmlns:xlink="http://www.w3.org/1999/xlink">
  <relationEntry>Zirlin, Larry.</relationEntry>
</cpfRelation>
```

The Process

Information extracted:

- Name of connection
- Type of entity
- **Type of connection**
- Link to more information (when available)

Connection types:

- Associated With
- Corresponded With
- Creator Of
- Referenced In

```
<cpfRelation
  xlink:arcrole="http://socialarchive.iath.virginia.edu/control/term#associatedWith"
  xlink:href="http://n2t.net/ark:/99166/w6f48mrk"
  xlink:role="http://socialarchive.iath.virginia.edu/control/term#Person"
  xlink:type="simple" xmlns:xlink="http://www.w3.org/1999/xlink">
  <relationEntry>Zirlin, Larry.</relationEntry>
</cpfRelation>
```

More Data Processing

Information extracted:

- Name of connection
- Type of entity
- Type of connection
- **Link to more information (when available)**

```
<cpfRelation
  xlink:arcrole="http://socialarchive.iath.virginia.edu/control/term#associatedWith"
  xlink:href="http://n2t.net/ark:/99166/w6f48mrk"
  xlink:role="http://socialarchive.iath.virginia.edu/control/term#Person"
  xlink:type="simple" xmlns:xlink="http://www.w3.org/1999/xlink">
  <relationEntry>Zirlin, Larry.</relationEntry>
</cpfRelation>
```


Control Panel

Network Style Select

Network	Nodes	Edges
UM Literary Collections		
All Connections	2930(0)	3159(1)
Alternative Press (Detroit, Michigan)	200(0)	271(0)
Blos, Joan W.	45(0)	44(0)
Bockris, Victor, 1949-	69(0)	78(0)
Broadside Press	43(0)	42(7)
Cope, David, 1948-	61(1)	90(0)
Delbanco, Nicholas	107(0)	106(0)
Dumas, Alexandre, 1802-1870	445(0)	482(0)
Fraser, Russell A.	40(0)	47(0)
George, Emery Edward, 1933-	65(1)	68(0)
Guest, Judith	9(0)	30(0)
Hanuman Books	70(1)	97(0)
Kramer, Aaron, 1921-1997	72(0)	71(0)
Madgett, Naomi Cornelia Long	74(0)	75(0)
Piercy, Marge	26(0)	15(0)
Pohrt, Tom	23(0)	23(0)
Swinburne, Algernon Charles, 1837-1912	1258(0)	1297(1)
University of Michigan Press	104(0)	104(0)
Waldman, Anne, 1945-	360(0)	493(0)
Walp, Lee	2(0)	1(0)

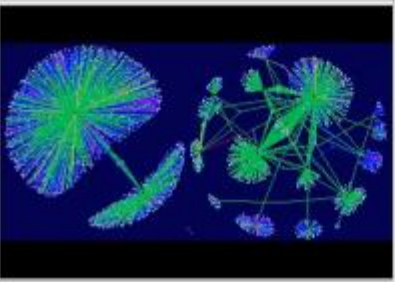
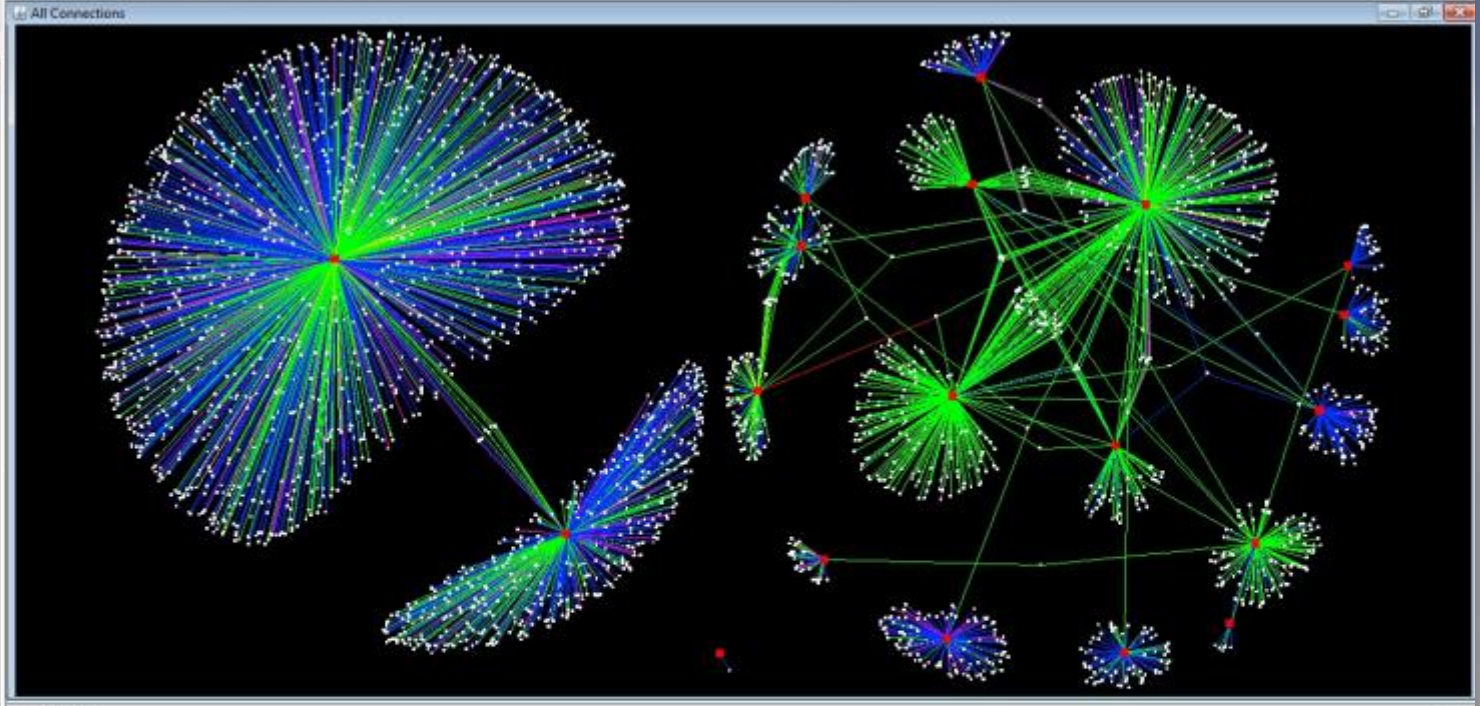


Table Panel





name	interaction	Entity_Type	Target_Link
Madgett, Naomi Cornelia Long. (associatedWith) Reed, Ishmael, 1938-	associatedWith	Person	http://hdl.net/ark:/99166/w6f2qjg

Node Table Edge Table Network Table

Memory: OK

Visualizing the Data

Edge Color (Unselected) Mapping

Edge Color (Unselected)	interaction
	associatedWith
	correspondedWith
	creatorOf
	referencedIn

Session: \\uflib-users.m.storage.umich.edu\ufib-users\home\folders\mrcaruth\Documents\Consultations\Special Collections\SNAC EAC\Excel files version 2\LiteraryCollection2016.cys

File Edit View Select Layout Apps Tools Help

Control Panel

Network Style Select

Network	Nodes	Edges
UM Literary Collections		
All Connections	2930(0)	3159(1)
Alternative Press (Detroit, Michigan)	200(0)	271(0)
Blos, Joan W.	45(0)	44(0)
Bockris, Victor, 1949-	69(0)	78(0)
Broadside Press	43(0)	42(7)
Cope, David, 1948-	61(1)	90(0)
Delbanco, Nicholas	107(0)	106(0)
Dumas, Alexandre, 1802-1870	445(0)	482(0)
Fraser, Russell A.	40(0)	47(0)
George, Emery Edward, 1933-	65(1)	68(0)
Guest, Judith	9(0)	30(0)
Hanuman Books	70(1)	97(0)
Kramer, Aaron, 1921-1997	72(0)	71(0)
Madgett, Naomi Cornelia Long	74(0)	75(0)
Piercy, Marge	26(0)	15(0)
Pohrt, Tom	23(0)	23(0)
Swinburne, Algernon Charles, 1837-1912	1258(0)	1297(1)
University of Michigan Press	104(0)	104(0)
Waldman, Anne, 1945-	360(0)	493(0)
Walp, Lee	2(0)	1(0)

All Connections

Table Panel

name	interaction	Entity_Type	Target_Link
Madgett, Naomi Cornelia Long. (associatedWith) Reed, Ishmael, 1938-	associatedWith	Person	http://hdl.net/ark:/99166/w6f2qjg

Node Table Edge Table Network Table

Memory: OK

Control Panel

Network Style Select

Network	Nodes	Edges
UM Library Collections		
All Connections	2630(0)	3159(1)
Alternative Press (Detroit, Michigan)	200(0)	271(0)
Blos, Joan W.	45(0)	44(0)
Bockris, Victor, 1949-	69(0)	78(0)
Broadside Press	430(0)	42(7)
Cope, David, 1948-	61(1)	90(0)
Delbanco, Nicholas	207(0)	108(0)
Dumas, Alexandre, 1802-1870	445(0)	462(0)
Fraser, Russell A.	48(0)	47(0)
George, Emery Edward, 1933-	65(1)	68(0)
Guest, Judith	9(0)	10(0)
Hanuman Books	70(1)	97(0)
Kramer, Aaron, 1921-1997	72(0)	71(0)
Madgett, Naomi Comelia Long	74(0)	75(0)
Piercy, Marge	26(0)	25(0)
Pont, Tom	23(0)	23(0)
Swinburne, Algemon Charles, 1837-19	1258(0)	1297(1)
University of Michigan Press	304(0)	104(0)
Waldman, Anne, 1945-	360(0)	493(0)
Walp, Lee	2(0)	1(0)

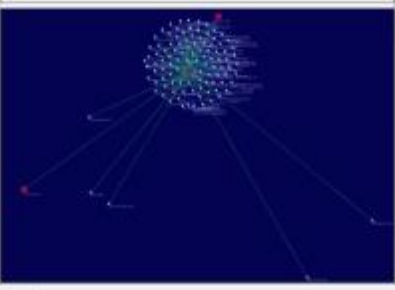
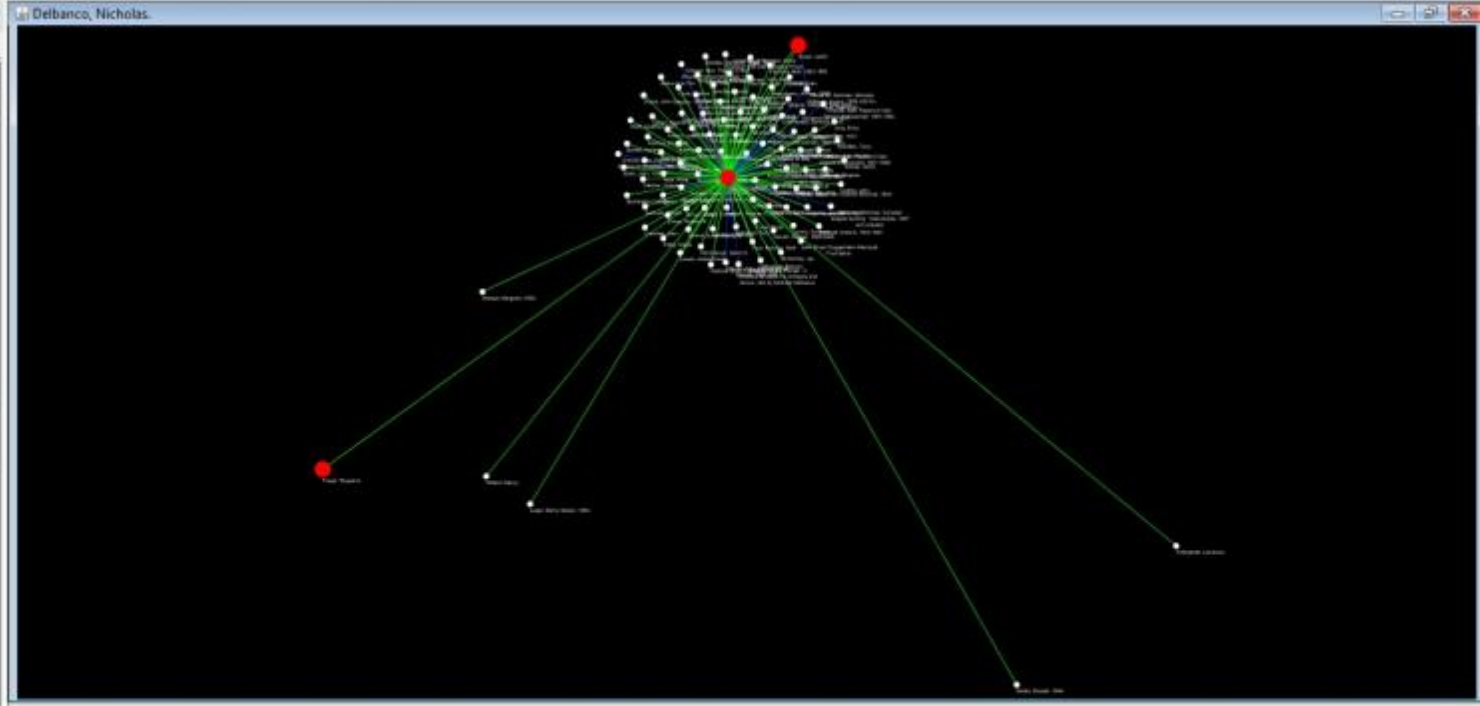


Table Panel

name	interaction	Entity_Type	Target_Link
Delbanco, Nicholas. (creatorOf) Cheuse, Alan. Papers of Alan Cheuse [manuscript], 1991-1995.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/647860658
Delbanco, Nicholas. (creatorOf) Cheuse, Alan. Papers of Alan Cheuse [manuscript], 1992-1996.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/647883377
Delbanco, Nicholas. (creatorOf) Cheuse, Alan. Papers of Alan Cheuse [manuscript], 1961-1988.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/647808490
Delbanco, Nicholas. (creatorOf) Cheuse, Alan. Papers of Alan Cheuse, 1974-1989.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/647824710
Delbanco, Nicholas. (creatorOf) Cheuse, Alan. Papers of Alan Cheuse [manuscript], 1991-1992.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/647833097
Delbanco, Nicholas. (referencedIn) Finkel, Donald. Papers, 1947-1983.	referencedIn	ArchiveResource	http://www.worldcat.org/oclc/28419612
Delbanco, Nicholas. (creatorOf) Satches, David, 1912-2003. Hopwood Awards Collection, 1930-	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/34370265
Delbanco, Nicholas. (creatorOf) Carver, Raymond, 1938-1988. Papers, 1975-1984.	creatorOf	ArchiveResource	http://www.worldcat.org/oclc/17188335

Node Table | Edge Table | Network Table

Memory OK

Sharing the Visualizations

Share visualizations via web-publishing companion platform to Cytoscape:

CyNetShare

<http://cynetshare.ucsd.edu/#/>

Working example:

<http://goo.gl/eHYLUi>

Sharing the Visualizations

CyNetShare



An easy way to share your network visualizations

The interface features a background of a complex network visualization with many nodes and edges. Overlaid on this are several input fields and buttons. At the top, there are two boxes labeled 'Project Web Site' and 'Documentation'. Below these are 'Public Files' and 'Gists'. The main section contains a 'Network Data URL' label with an input field 'Enter Network File URL', and a 'Visual Style URL (Optional)' label with an input field 'Enter Style URL'. A green 'Visualize!' button is located to the right of the second input field.

Project Web Site

Documentation

Public Files

Gists

Network Data URL

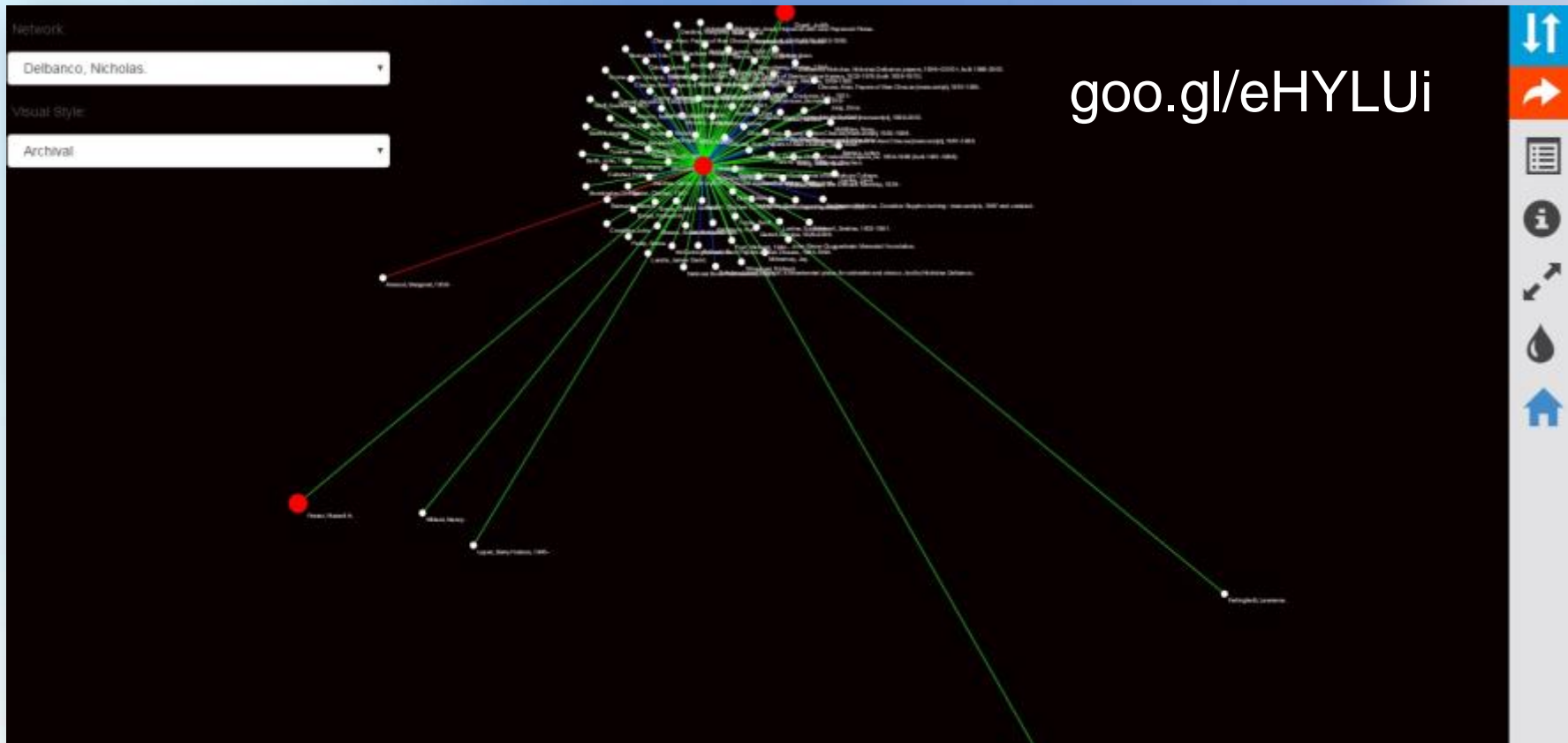
Enter Network File URL

Visual Style URL (Optional)

Enter Style URL

Visualize!

Sharing the Visualizations



Next Steps

Continue to streamline the workflow

Next Steps

Perform user testing

(Incorporate feedback into service model)

Next Steps

Explore more options for using and
manipulating the data

(Customize and host local CyNetShare instance)

[http://www-
personal.umich.edu/~mcarruth/HanumanBooksVis/web_session/index.html#/
/](http://www-personal.umich.edu/~mcarruth/HanumanBooksVis/web_session/index.html#/)

Thanks!

Matt Carruthers

mcarruth@umich.edu

@mattadata2

Slides: goo.gl/smvkvf