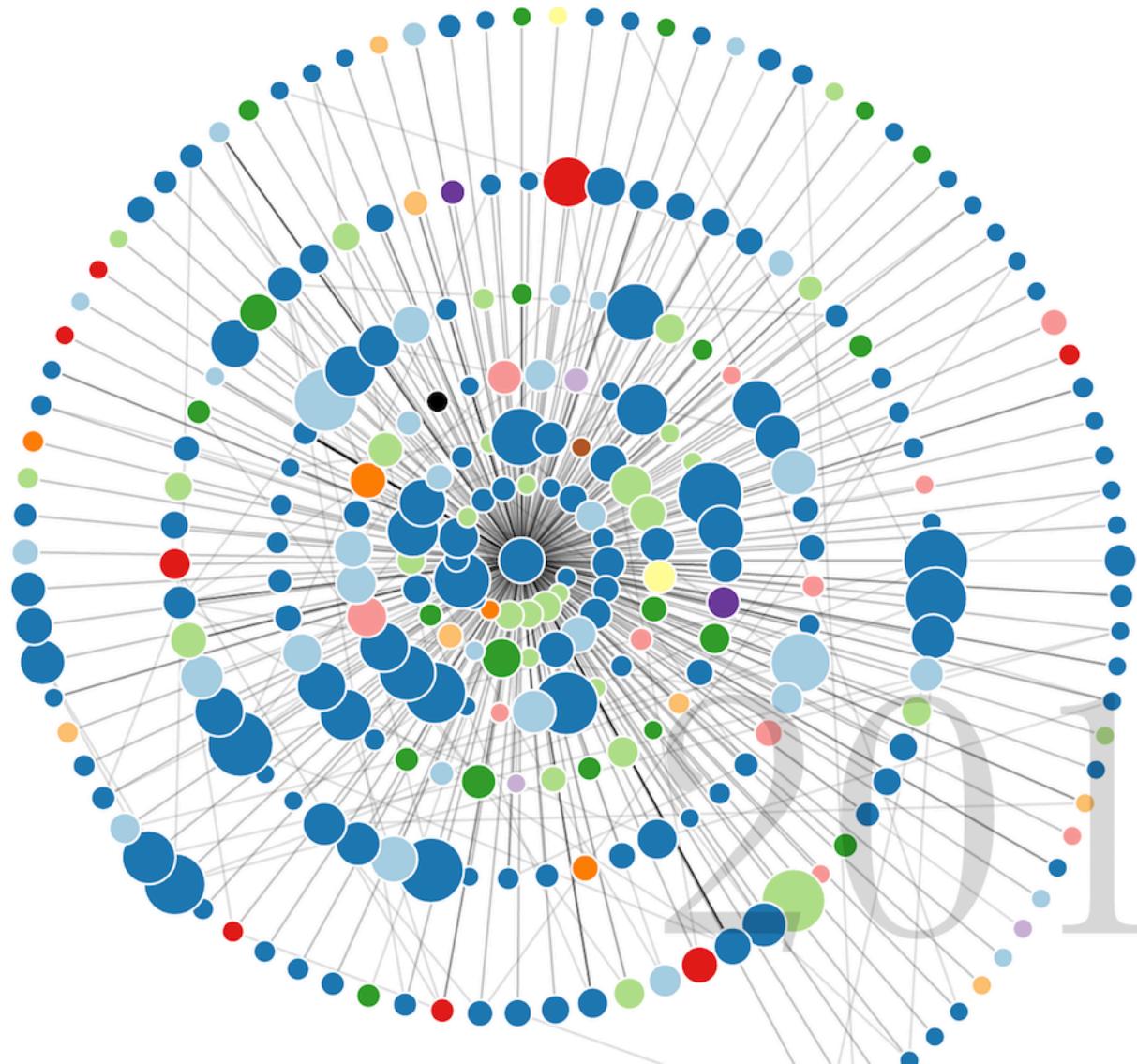


Visualizing Scholarly Influence

Jason Portenoy & Jevin West, iSchool, University of Washington



scholar.eigenfactor.org/fields

Jevin West, jevinw@uw.edu

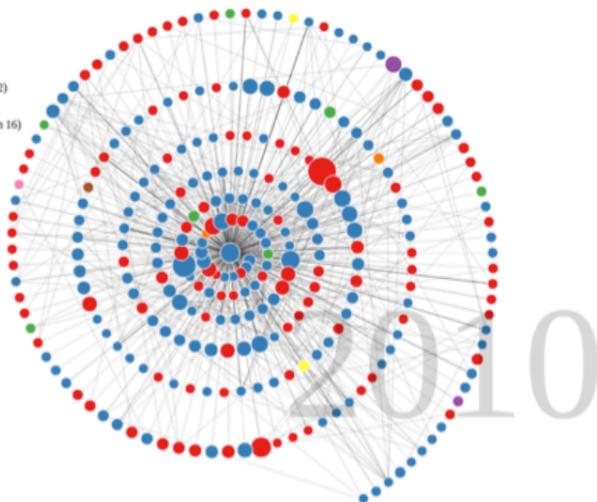
How do you visualize scholarly influence?

Visualizing Interdisciplinarity



Jason Portenoy

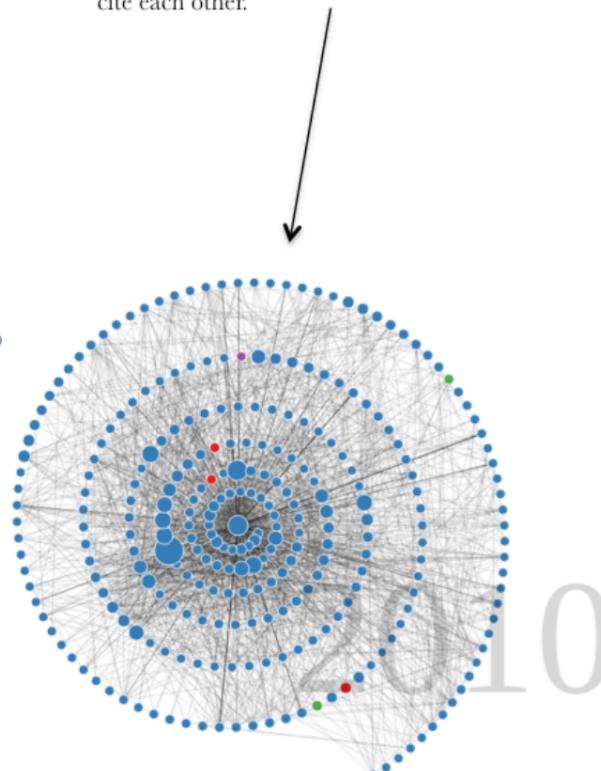
- Papers in category "Medicine" (domain 6)
- Papers in category "Biology" (domain 4)
- Papers in category "Chemistry" (domain 5)
- Papers in category "Engineering" (domain 8)
- Papers in category "Material Science" (domain 12)
- Papers in category "Physics" (domain 19)
- Papers in category "Agriculture Science" (domain 16)
- Papers in category "Social Science" (domain 22)



A more sparse network indicates fewer citations between papers shown in the network. This could be a result of the central scholar having impact across a wider set of academic communities.

A denser network means that the papers that cite the central author also tend to cite each other.

- Papers in category "Biology" (domain 4)
- Papers in category "Medicine" (domain 6)
- Papers in category "Chemistry" (domain 5)
- Papers in category "Social Science" (domain 22)



Visualizing Scholarly Influence Over Time

Influence of Pew Scholars

Roberta A. Gottlieb

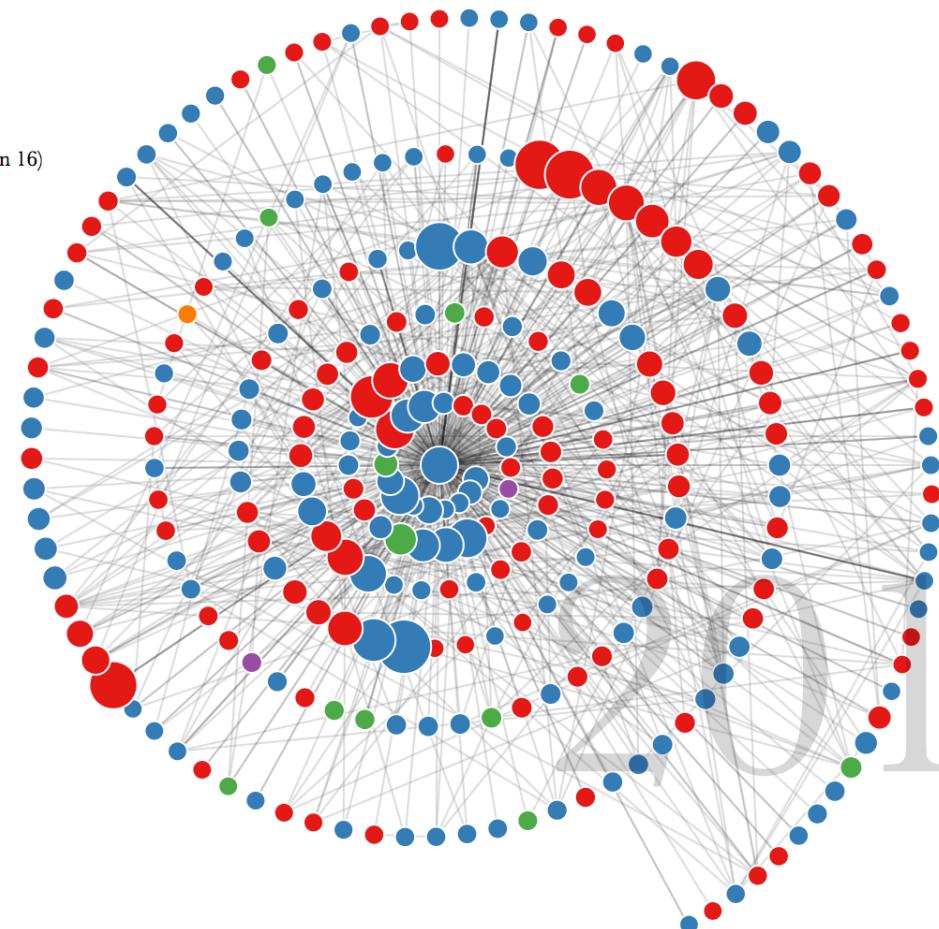
[Learn More](#)

- █ Papers in category "Medicine" (domain 6)
- █ Papers in category "Biology" (domain 4)
- █ Papers in category "Chemistry" (domain 5)
- █ Papers in category "Unknown" (domain 0)
- █ Papers in category "Agriculture Science" (domain 16)

Roberta A.
Gottlieb



Pew Scholar
1997



1997

Visualizing Scholarly Influence Over Time

Influence of Pew Scholars

Mark W. Grinstaff

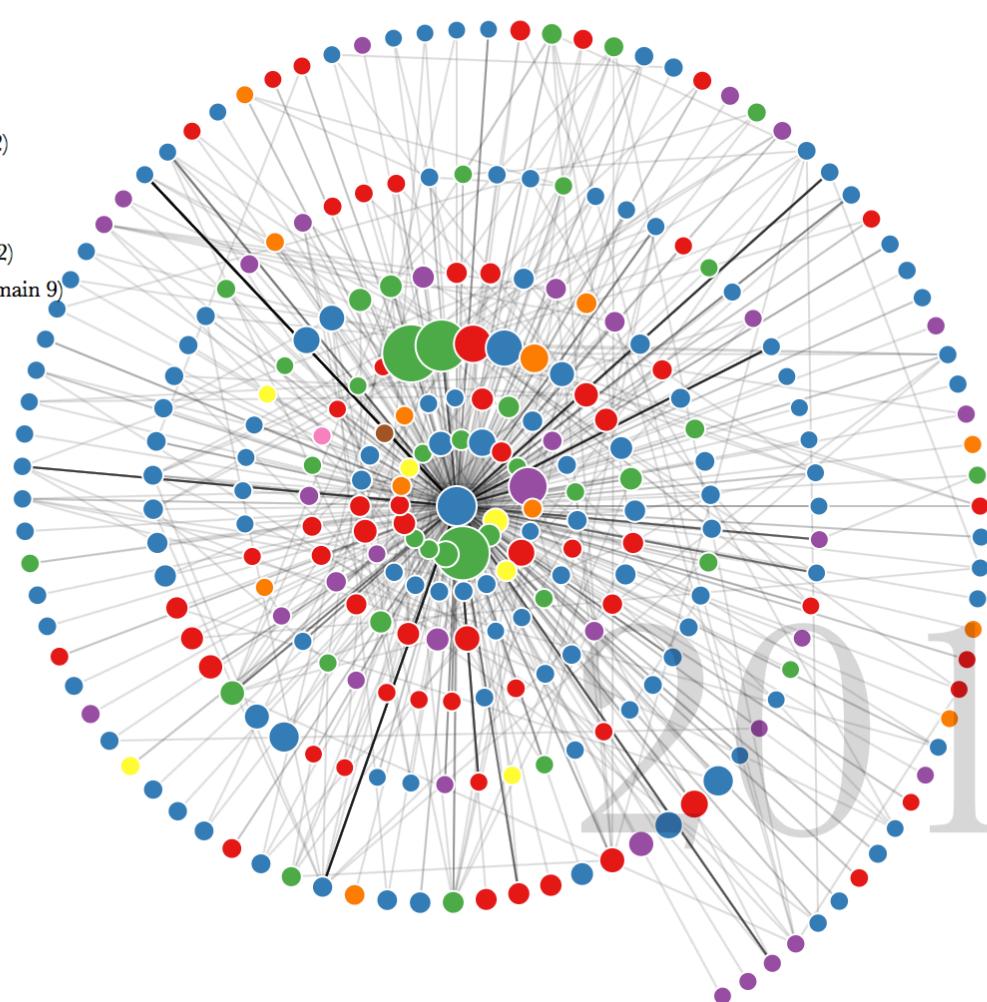
[Learn More](#)

- Papers in category "Chemistry" (domain 5)
- Papers in category "Medicine" (domain 6)
- Papers in category "Biology" (domain 4)
- Papers in category "Material Science" (domain 12)
- Papers in category "Engineering" (domain 8)
- Papers in category "Physics" (domain 19)
- Papers in category "Computer Science" (domain 2)
- Papers in category "Environmental Sciences" (domain 9)

Mark W.
Grinstaff



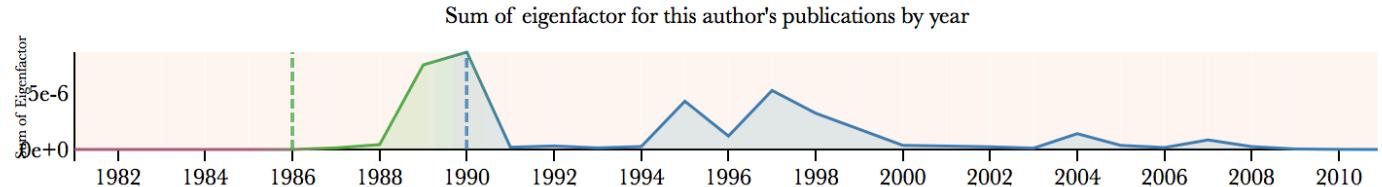
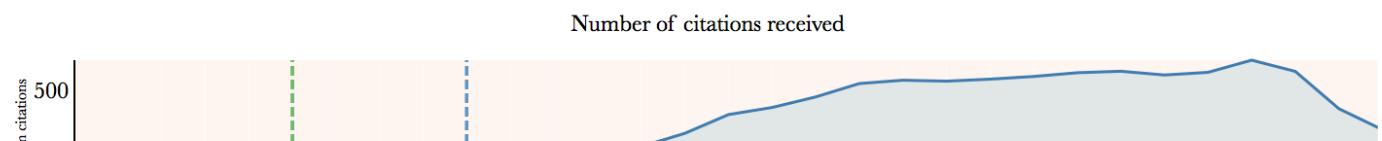
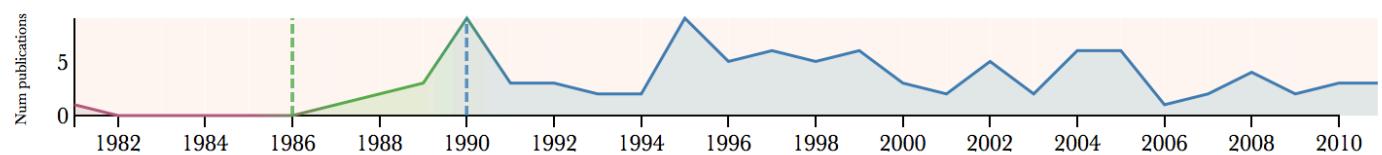
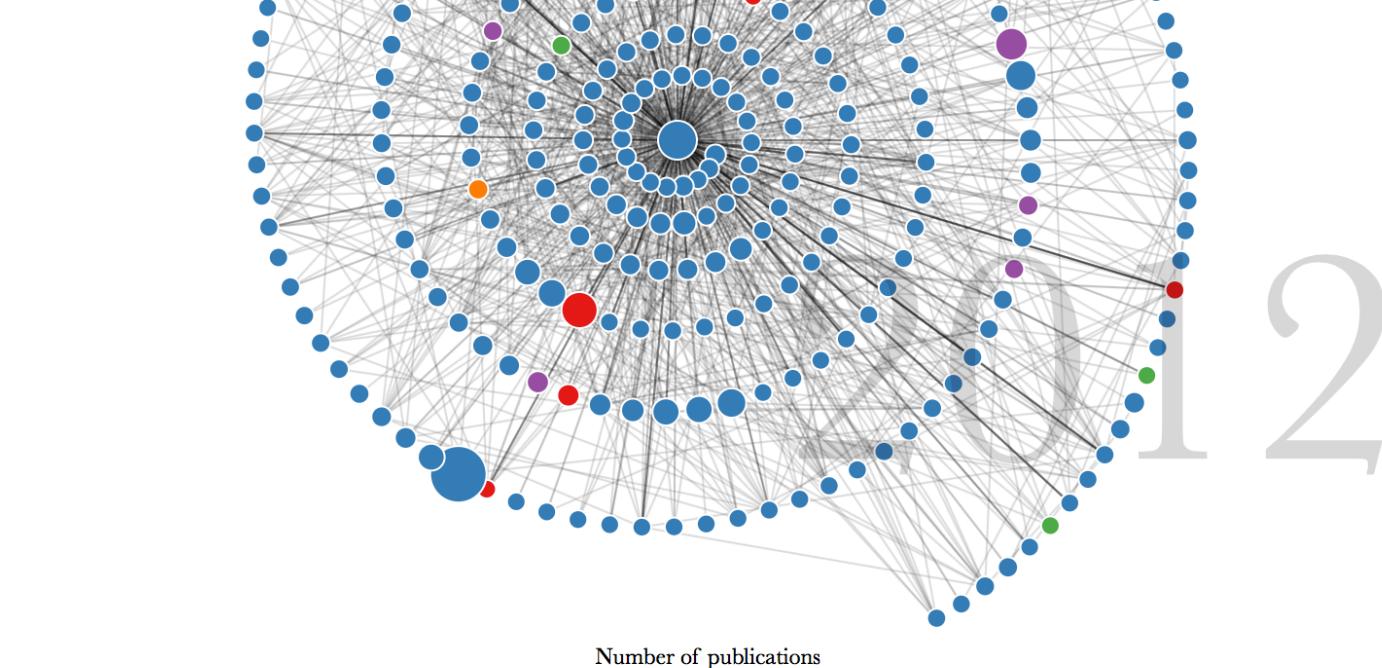
Pew Scholar
1999



Philip A.
Hieter

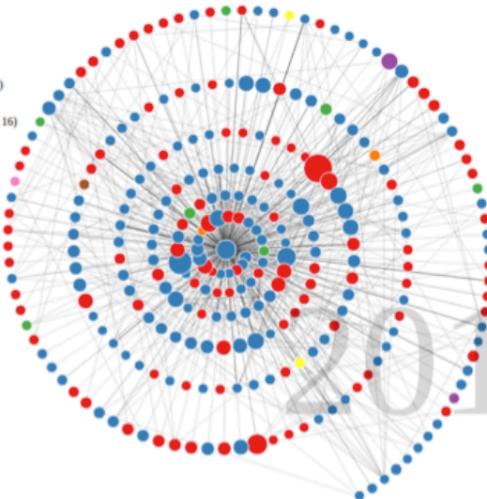


Pew Scholar
1986



Comparing Authors

- Papers in category "Medicine" (domain 6)
- Papers in category "Biology" (domain 4)
- Papers in category "Chemistry" (domain 5)
- Papers in category "Engineering" (domain 8)
- Papers in category "Material Science" (domain 12)
- Papers in category "Physics" (domain 19)
- Papers in category "Agriculture Science" (domain 16)
- Papers in category "Social Science" (domain 22)

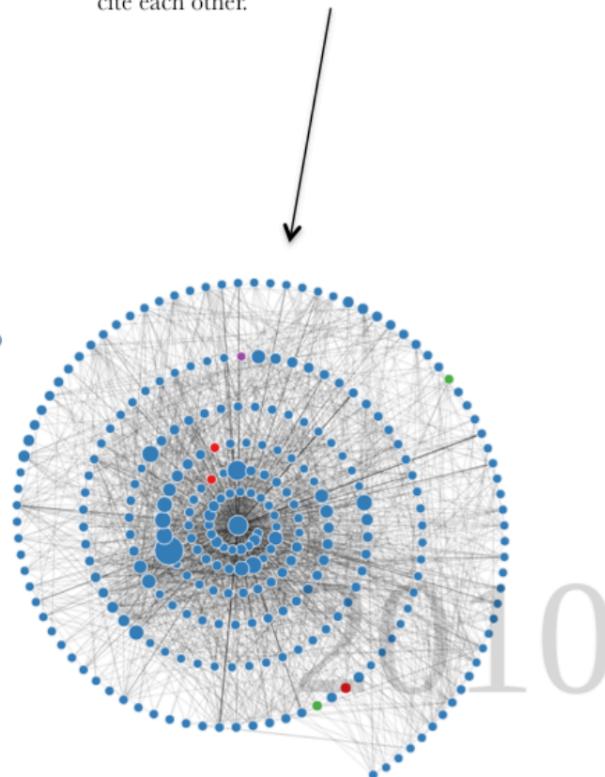


A denser network means that the papers that cite the central author also tend to cite each other.



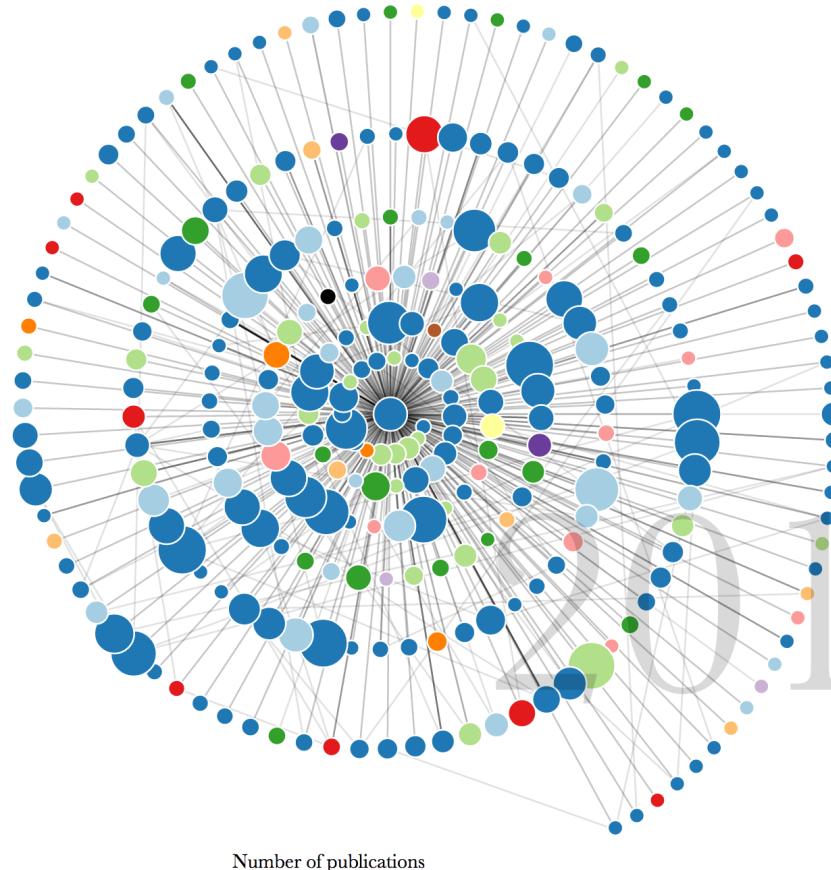
A more sparse network indicates fewer citations between papers shown in the network. This could be a result of the central scholar having impact across a wider set of academic communities.

- Papers in category "Biology" (domain 4)
- Papers in category "Medicine" (domain 6)
- Papers in category "Chemistry" (domain 5)
- Papers in category "Social Science" (domain 22)



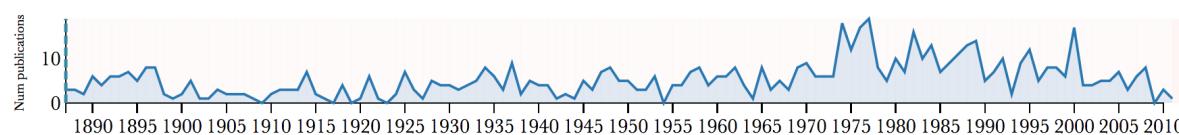
- █ Papers in field "Economics"
- █ Papers in field "Sociology"
- █ Papers in field "Law"
- █ Papers in field "Political science-US domestic"
- █ Papers in field "Anthropology"
- █ Papers in field "Organizational and marketing"
- █ Papers in field "Political science - international"
- █ Papers in field "Demography"
- █ Papers in field "Ecology and evolution"
- █ Papers in field "Education"
- █ Papers in field "Physical anthropology"
- █ Papers in field "Molecular & Cell biology"
- █ Papers in field "Classical studies"

History:
Progressive era
American
populism

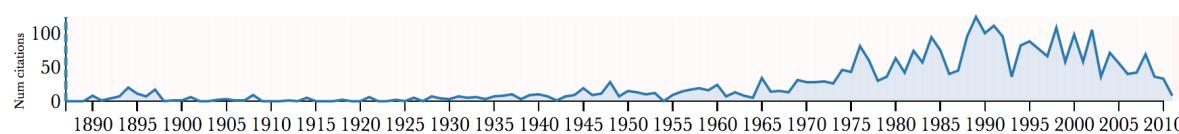


11

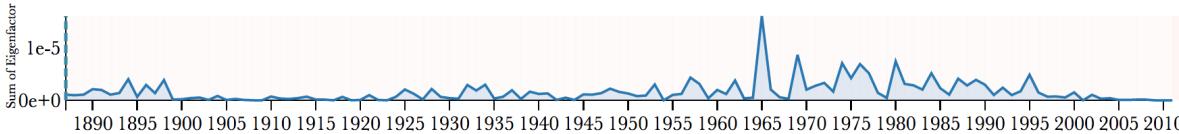
Number of publications



Number of citations received



Sum of eigenfactor for this field's publications by year

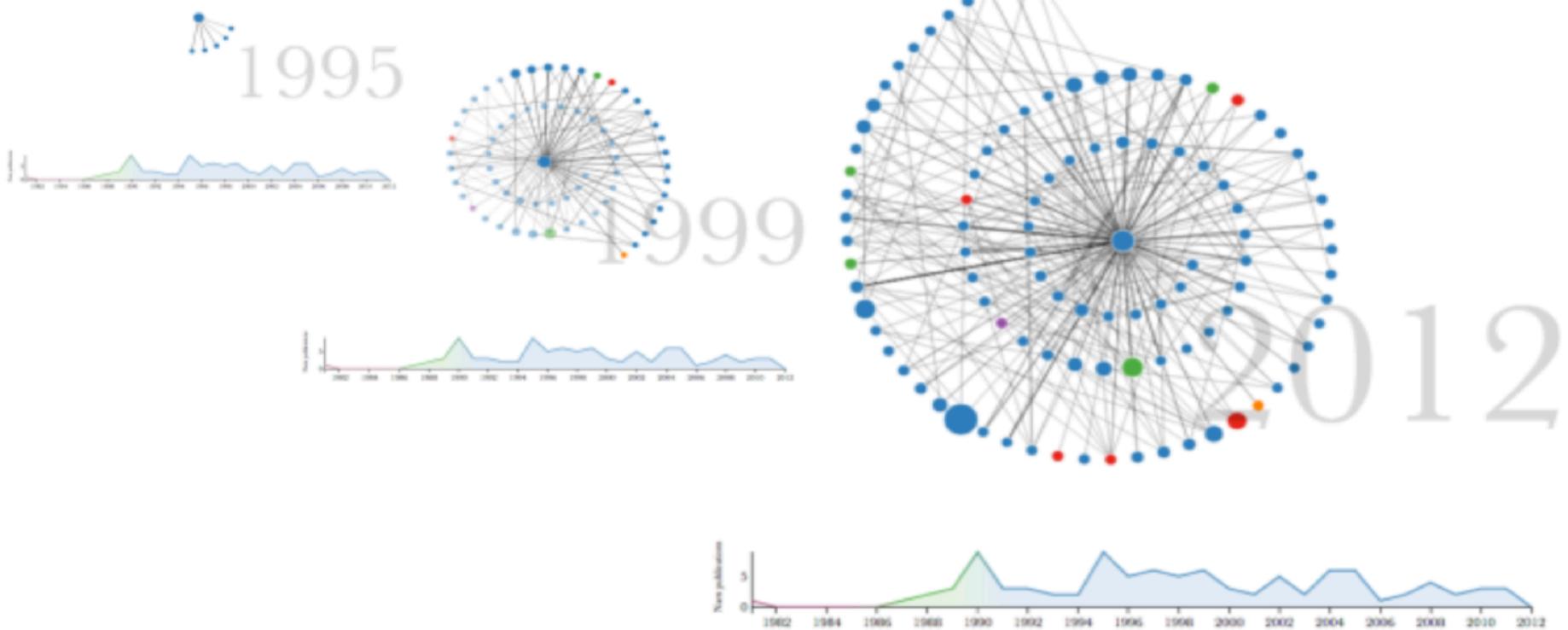


Future Directions

- Expand to all fields within JSTOR
- Annotate reviews and method papers
- Automatic plug-in to any dataset
- Integrate interviews from Chemical Heritage Foundation
- Automated narration of visualization
- Author disambiguation and further data cleaning
- User studies for improved hypothesis generation

Explore the data

scholar.eigenfactor.org/fields



* Please use Chrome web browser for best results

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