

# Evolving Networks of Expertise



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# Who am I?

- PhD Biomedical Science
- Working to transform scholarly communication since 2003
- Established the community program at Mendeley – 1000 advisors from 650 schools in 60 countries.
- I've been active in online science communities since 1995

# The internet was designed for scholarly communication!

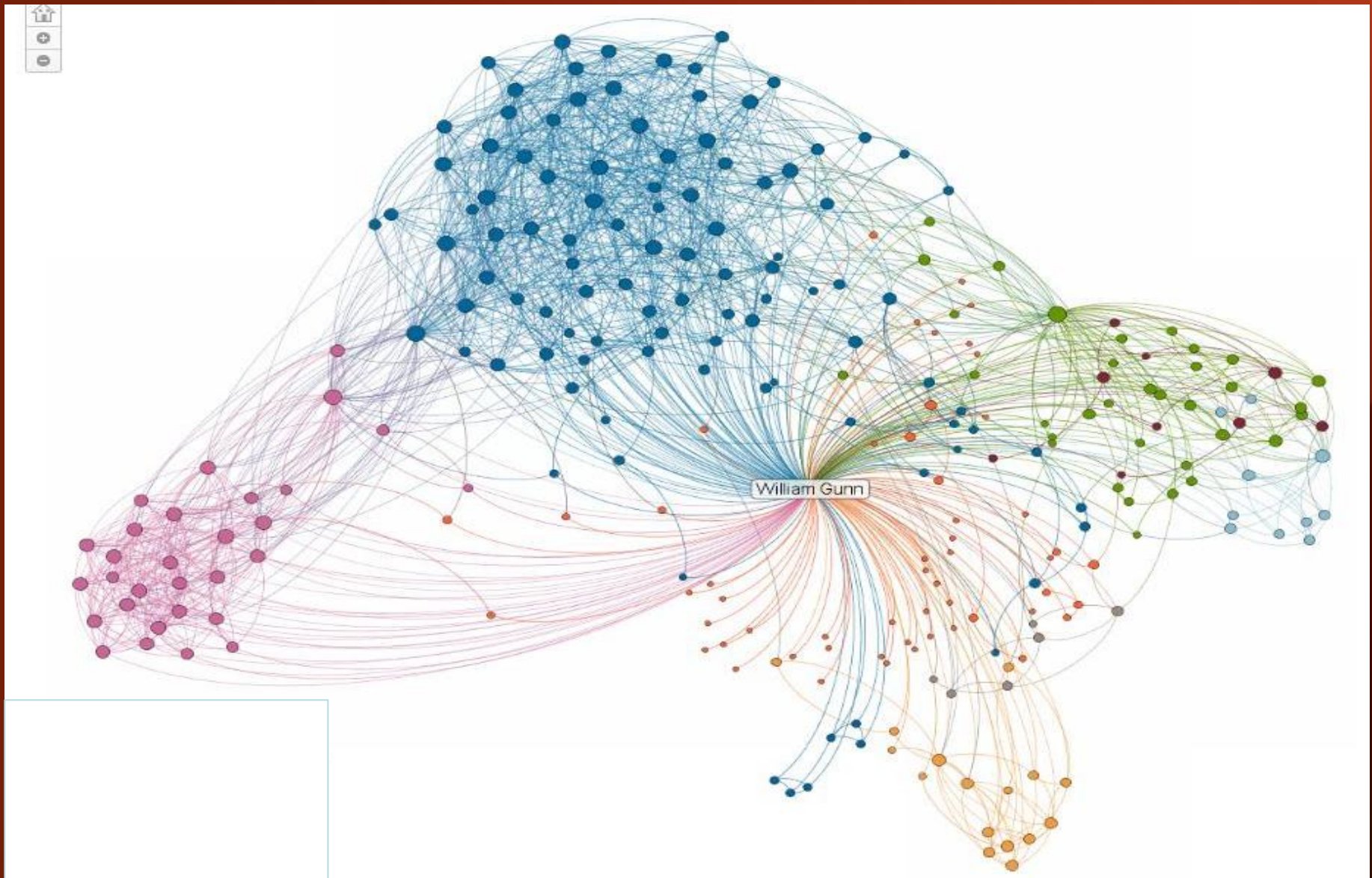
- The purpose of ARPAnet was to share data and computing resources.
- usenet and mailing lists were the pre-web networks

# What is a social network, anyways?

- Before we can think about how communities develop online, we have to get our terms straight
- Particularly distinguishing a network from a community.



# Networks vs. communities



LinkedIn is the platform on which the network grew.

# How do communities grow online?



# Why do people use the web?

- Asking questions of a broad audience
- Sharing & discovering pictures, music, video, links, datasets, or just thoughts with a broad audience.

# Why not just email?

- Since everyone has the entire web at their disposal, people look for the best single place for a given activity.



# A few examples

- Stack Exchange
  - Asking in public is different!
  - Questions lead to answers lead to more questions
  - Lots of little tweaks that made answers easy to find by tagging & surfacing related questions.
  - Now people use it to show off expertise & even to hire.

# Link sharing – Delicious

- Like bookmarks, but online, which meant:
  - Accessible from anywhere
  - Part of a communal pool of links, which allowed you to go from your collection, to other collections
  - Sharing in public is different!
  - People + shared interest = community
    - Not a community of professional link curators, but people interested in things represented by links.

# Photo sharing (Flickr)

- You could email pictures, but this was better – easier to just send the link to people & it made galleries and showcased your pictures better
- Sharing in public is different!
- People + shared interests = community
  - Not a community for photographers, communities of place or subject.

# Twitter

- Started as easier way to send multi-recipient text messages
- Community grew with the development of the #hashtag, a mechanism invented by twitter users to group tweets about a certain topic., just like Flickr tags groups pictures and the old delicious (RIP) grouped links by tag.

# Facebook

- Sharing and discovering friends
- Originally, a safe place for just you and your (college) friends, separate from the wild web.
- Cargo-cult networks





# Cargo-cult Networks

# Social networks?

- What fundamental activity do they make so compellingly easy it's worth having another inbox?
- liking, sharing, friending are just a different modality of “reply”.
- They're personalized content filters
- Social interactions arise as a consequence of sharing & discovering on the platform





Make people willing to leave their inbox

# Research documents

## Mendeley

- Sharing and discovering PDFs
- Not a site for publishers or librarians, but people who have expertise or interest in research topics.

# How can you develop community?

- Are you making sharing and discovering of a fundamental kind of content so much easier that people will do that sharing on your service rather than just email or post to one of their existing sites?
- If not, if you're wanting to grow a topic-specific community, why not try to grow it where people already are?



# Make it porous & part of the web.

- All these examples show that the main motivation for people to get data(pictures, bookmarks, etc) off their computers and on the web is because it helps them find more of the same.
- Communities must be open if they are to thrive.

# Online Science Communities

## Friendfeed Life Scientists

- We were a bunch of scientists that blogged, and we mostly communicated via blog posts, linking to one another, or by commenting on each other's blogs. Some also used Twitter and Flickr and other services.
- a neat way to aggregate all that together and discuss all in one place.
- I got my job through my activity on Friendfeed

# Online Science Communities

## Scienceblogs

- Installing blogging software and setting up webhosting is time-consuming and tedious.
- Scienceblogs.com got more scientists blogging than any other single effort.
  - Then they went and screwed it up by inviting industry scientists to blog about their companies' products without getting community approval.

# Online Science Communities

#rstats

Some of the smartest people in data analysis frequently tag their tweets with #rstats

Spontaneously evolved

Helped me tremendously as I learned,

# Online Science Communities

Google+ science circles

Facebook-shy scientists & lots of the Friendfeed crowd  
checked out Google+.



# Online Science Communities

## Mendeley

The earth science community on Mendeley is about 4000 strong, with about 1000 Earth Science groups containing a million earth science papers.

The biggest group has hundreds of scientists.

These communities were partly already there, we just tapped into them and they grew from there.

# MENDELEY

[www.mendeley.com](http://www.mendeley.com)

THANK  
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