Formality Across Mediums

Joseph Ciurej
Lavanya Iyer
Dylan Nugent
Stavan Patel
Matthew Zettinger

How Do People Communicate?

- On which platforms do people send messages?
  Email, GTalk, Facebook, LinkedIn

- How formal are these messages?
  Where are people more formal and informal?

- How do they change over time?
  Tell the evolution of relationships

- What does the quantity of them say?
  Does quantity predict medium or formality?

How Do We Measure?

Formality

- Structure
  Signatures, full sentences, and proper punctuation are more formal

- Vocabulary
  Word choice and emoticon usage can give clues to formality or informality

How Do We Measure?

Quantity

- Instant Messages look different from emails
  Raw comparison of number would be meaningless

- Using words in each message as quantity
  This gives us similar quantity for similar ideas

- Ignore one-way communication
  Mostly spam or other uninteresting items

What Will We Do?

- Tell a person his or her story
  Visualizations will be for personal usage

- Collect the data using a Python program
  Our data sources provide APIs for this

- Produce JSON output for visualizing with D3
  The program will score and aggregate formality

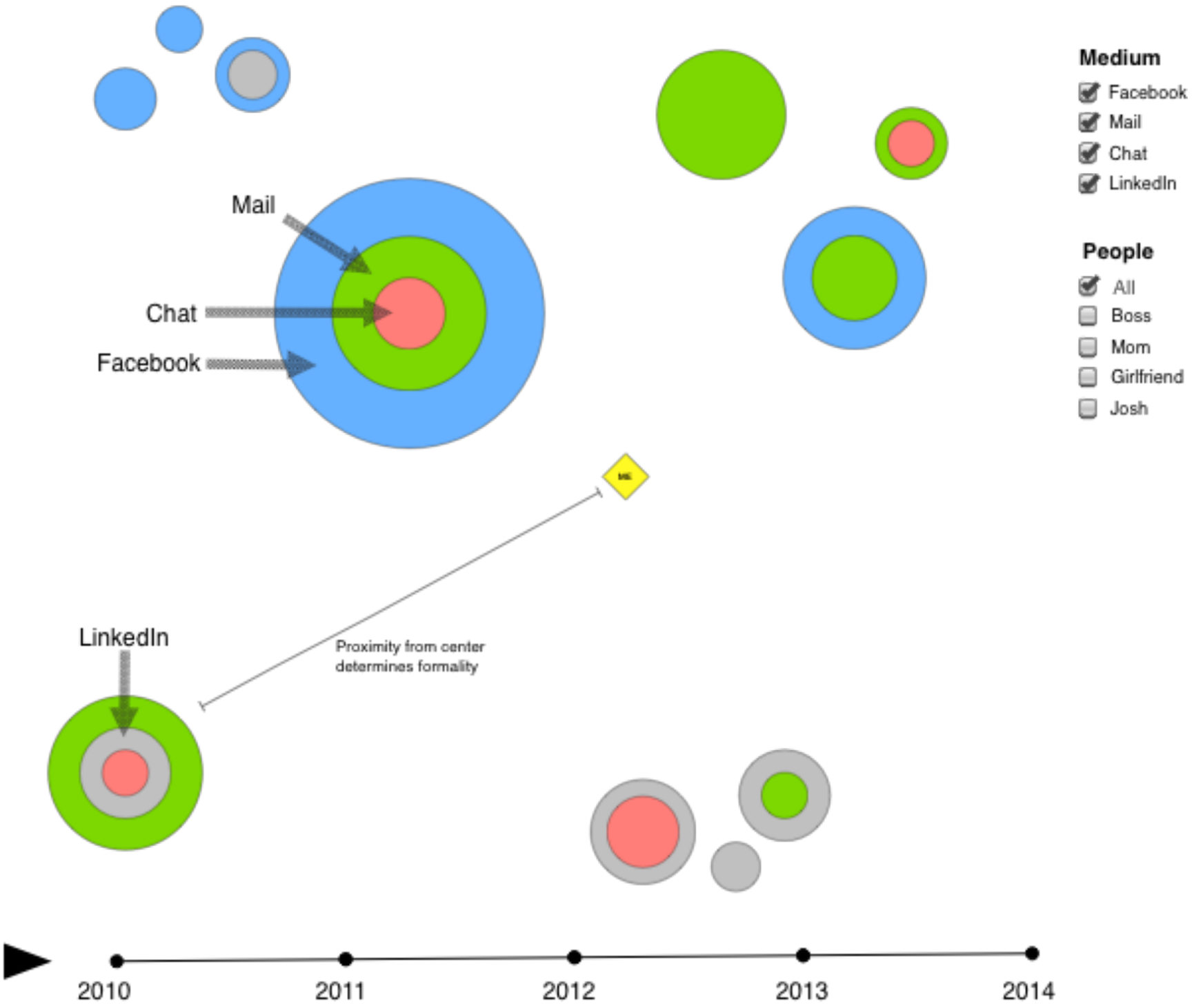
Why Are We Doing This?

- Hypothesis: Formal messages are mostly email
  We want to see if IMs are generally less formal

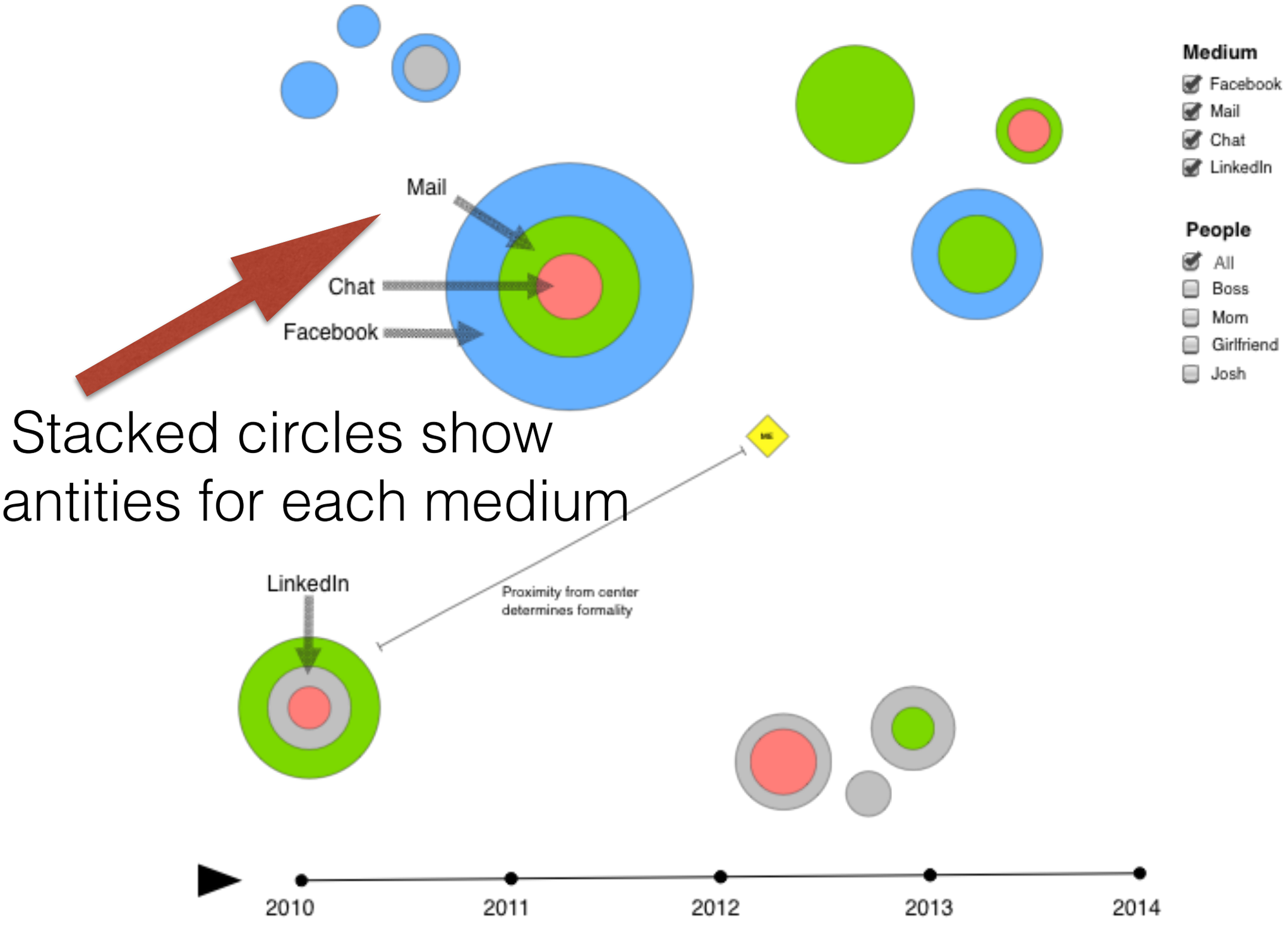
- Hypothesis: More messages indicates informality
  We want to see how quantity and formality correlate

- Storytelling: Communication over time
  How does your formality change with a person over time? How does your usage of different message mediums change?

What Will It Look Like?

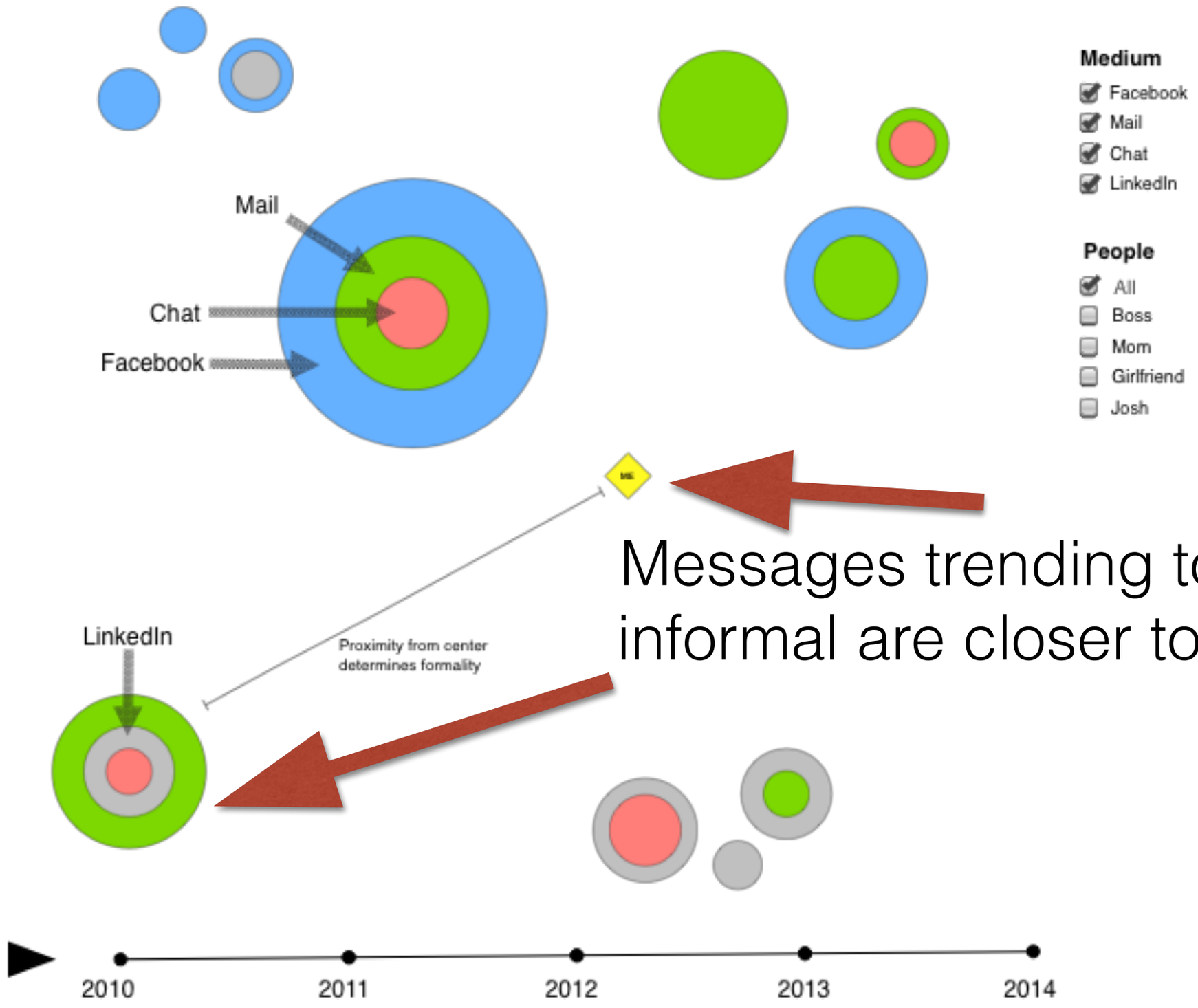


What Will It Look Like?

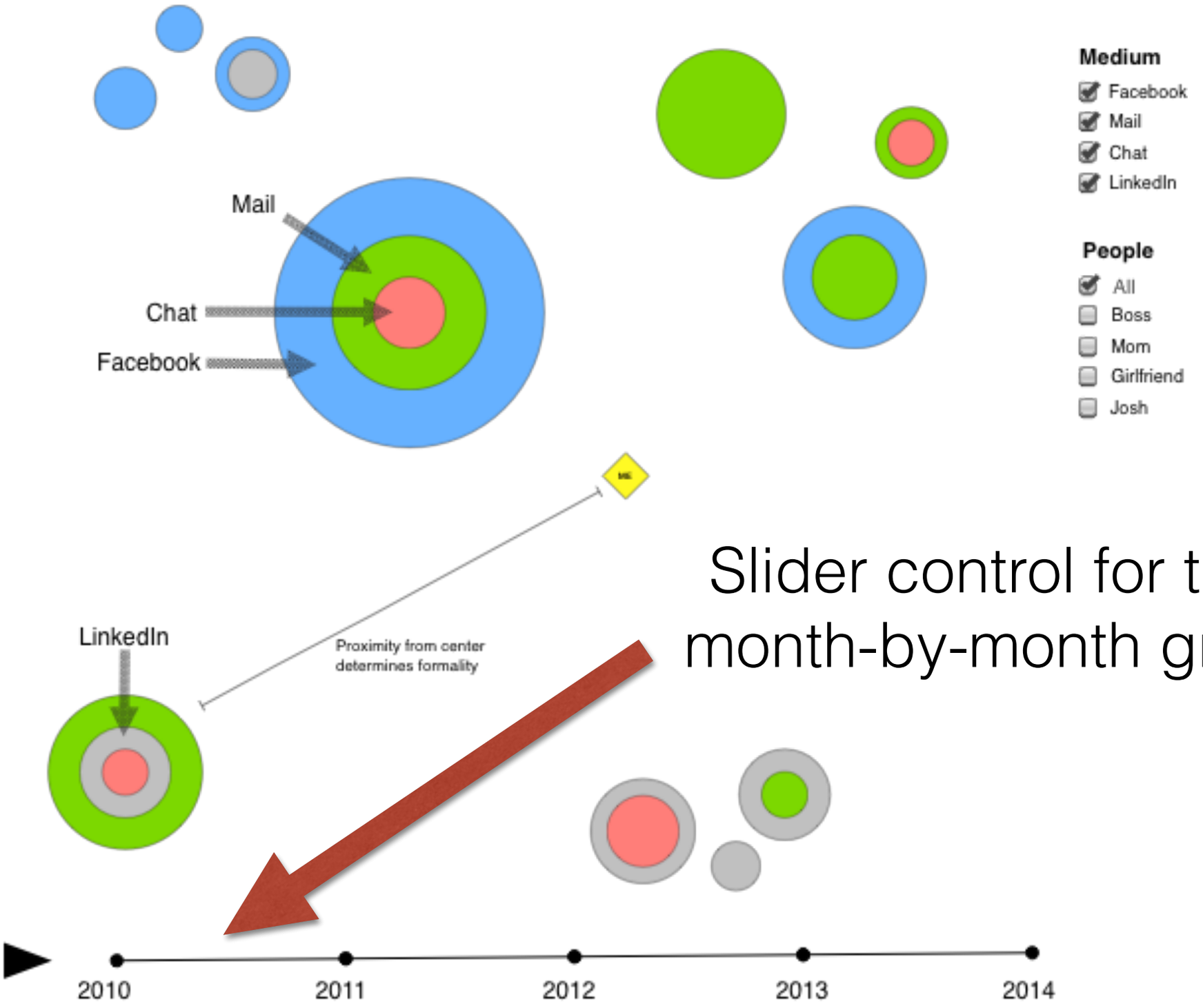


Stacked circles show quantities for each medium

What Will It Look Like?

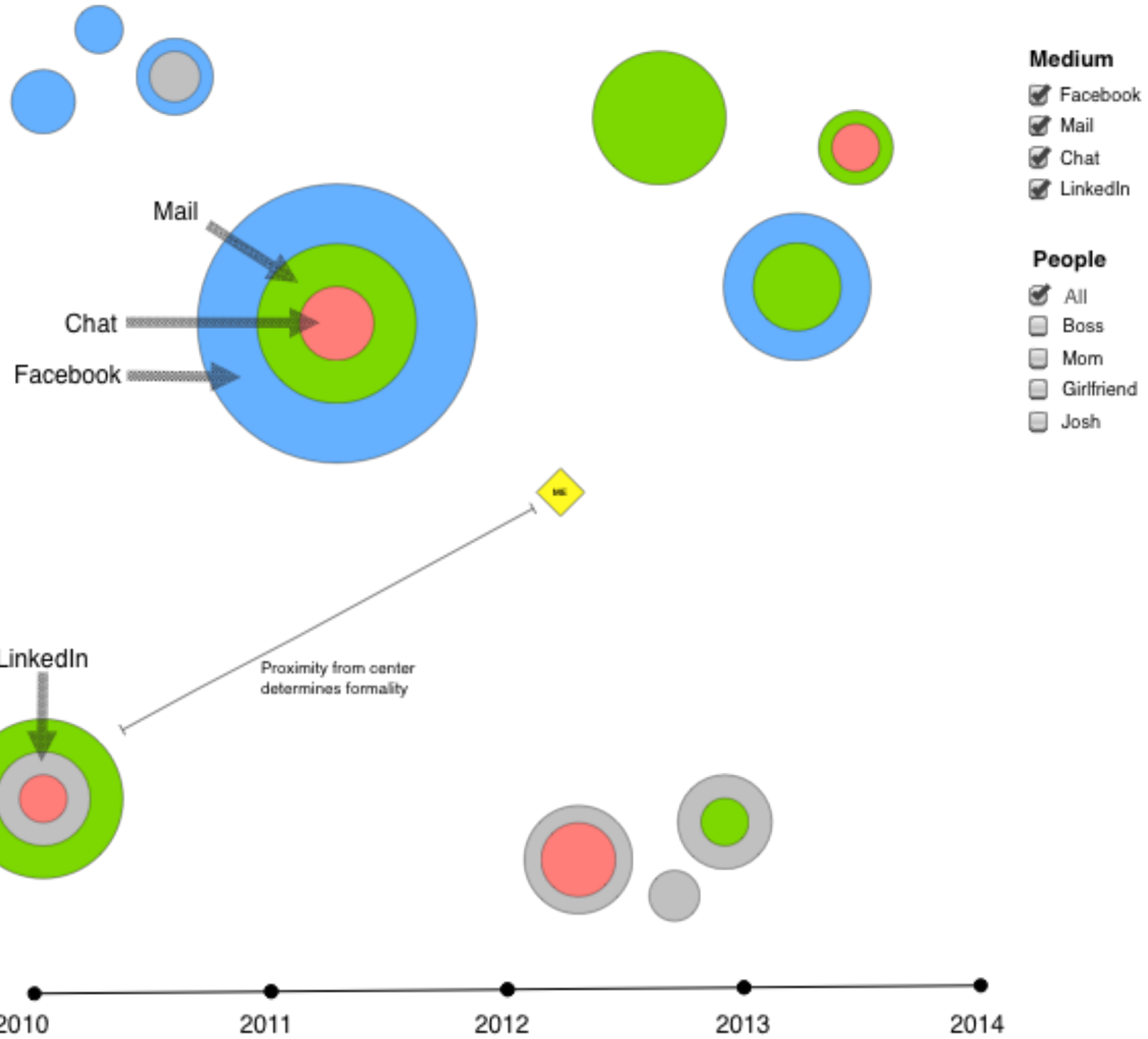


What Will It Look Like?



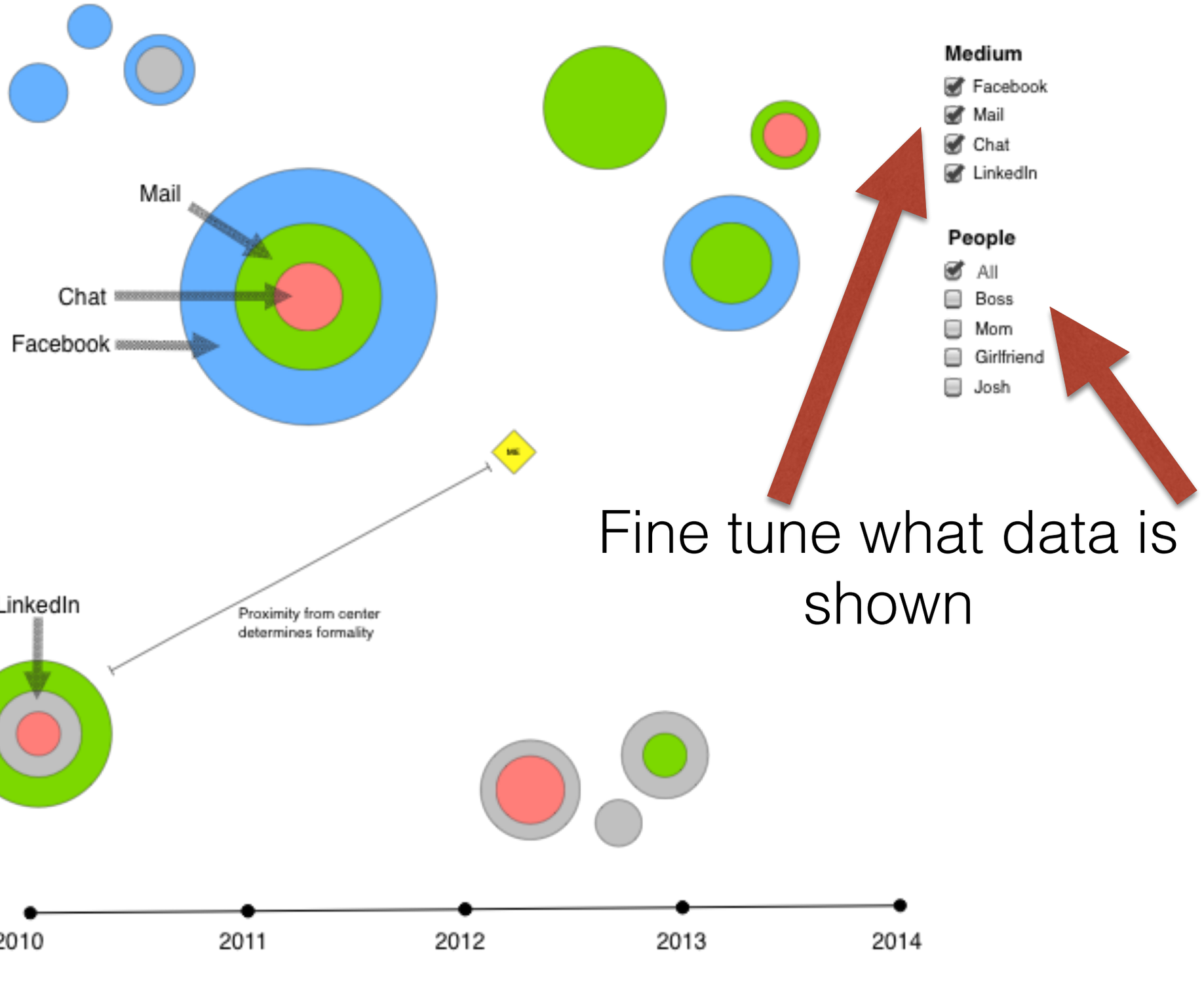
Slider control for time with month-by-month granularity

What Will It Look Like?



Playback feature to watch entire history

What Will It Look Like?



Fine tune what data is shown

Thanks!

Any questions?