Week 10: Social Networks

Data Wrangling and Visualization

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## Due This Week: [Problem Set 8](../problemsets/ps8.qmd)

## Readings & Reference Material

### Lecture: Social Network Visualization

### Reading

* Core Reading
  + Ognyanova, [“Static and dynamic network visualization with R”](https://kateto.net/network-visualization)
  + **DMSS**, ch 13
* Reference Materials
  + Newman, [Networks](https://doi.org/10.1093/oso/9780198805090.001.0001).
    - A technical and highly interdisciplinary look at networks, spanning physical networks, biological networks, social networks, and more. Comprehensive, lots of network theory.
  + Menczer, Fortuanto, and Davis, [A First Course in Network Science](https://doi.org/10.1017/9781108653947).
    - A short introduction focused on networks in a broad sense, with a focus on computation for network analysis in Python.
  + Jackson, [Social and Economic Network Analysis](https://press.princeton.edu/books/paperback/9780691148205/social-and-economic-networks).
    - As befits the name, a focus on economic and social networks.
  + Scott, [Social Network Analysis](https://doi.org/10.4135/9781529716597).
    - An introduction for beginners, with a focus on substance over computation.

## Network Visualization Examples

Social Networks has inspired a lot of creativity when it comes to think about things in relational contexts. A few examples are below to spark your interest and imagination ahead of your problem set this week.

* [Hamilton (Musical)](https://medium.com/data-science-at-microsoft/network-graphs-analysis-part-2-of-2-visualizing-the-characters-of-hamilton-as-a-social-network-ed61699df319)
* [Game of Thrones (TV Show and Books)](https://networkofthrones.com) *see also news coverage* [here](https://qz.com/650796/mathematicians-mapped-out-every-game-of-thrones-relationship-to-find-the-main-character)
* [Myst (Computer Game)](https://github.com/glthr/DeMystify)
* [Biblical Gospels (Religion)](https://www.martingrandjean.ch/data-visualization-network-gospels/)
* [Star Wars (Movies)](http://evelinag.com/blog/2015/12-15-star-wars-social-network/index.html#.VnAhsTZZG6A)
* [Marvel (Movies/Comics)](https://syntagmatic.github.io/marvel/?utm_source=chatgpt.com)

## Due Next Week: [Problem Set 9](../problemsets/ps9.qmd)