1. Define Homophily? Explain how to measure the presence of homophily in a network with an example?
2. Explain homophily test with an example?
3. Explain the mechanisms underlying homophily with an example? Page 90
4. What is affiliation network? Explain three types of link formation in affiliation networks? Page 93
5. How to distinguish between selection and social influence: longitudinal studies? Page 106
6. How to Quantifying the Interplay Between Selection and Social Influence. Page 106
7. Explain Tracking link formation in On-Line Data (Quantifying the effect of Triatic closure, focal closure and Membership closure). Page 97 Fig 4.9, Fig 4.10,Fig 4.11
8. Explain spatial model for Segregation with an example. Page 107

[(1086) Spatial Segregation: An Introduction - YouTube](https://www.youtube.com/watch?v=_SzN_R3FWCA)

1. Define structural balance for networks.
2. Define Balance Theorem and discuss its proof with an example network.
3. Discuss applications of structural balance.
4. Define WWW and The Web as a Directed Graph. Page 384
5. Define strongly connected component? Discuss The Bow-Tie Structure of the Web with an example. Page

[(1086) Centrality Measures - 16 Bow Tie Structure of the Web - YouTube](https://www.youtube.com/watch?v=qvkb_I6VnpU&t=137s)

1. Discuss the evolution of Web 2.0 Page 392