

UNIVERSITY OF TORONTO
DEPARTMENT OF SOCIOLOGY
PH.D. COMPREHENSIVE EXAMINATION IN Social Networks
February 2023

You are required to answer THREE (3) QUESTIONS (ONE QUESTION FROM EACH OF PARTS A, B & C). Each answer should be 10-12 pages (12-point Times New Roman font, standard margins, and double-spaced) in length. The complete exam should not total more than 36 pages in length (12-point Times New Roman font, standard margins, and double-spaced), not including references. THE COMMITTEE WILL NOT READ PAST THE 36TH PAGE.

Part A: Networks and inequality

1. How do variations in social capital contribute to the reproduction of inequality? How and when does social capital facilitate reductions in inequality?
2. Network diversity is inversely related to network homophily, or preference for forming ties with people similar in salient respects. How do variations in social settings (like schools or workplaces) affect how strong homophily is overall, what kinds of similarity are strongest, and how diverse or segregated networks in a setting are?

Part B: Diffusion and innovation

3. Critically discuss the concepts of novelty and creativity from a social networks perspective. Be sure to address the following questions: Where does novelty come from? How does one's network position enable or constrain one's creativity? And how do we account for whether novel ideas and products gain a foothold in the population?
4. A common view of network ties is as connections for spreading "things." Networks researchers have posited different models for the spread of different "things." Critically compare these models and/or perspectives with a focus on how suitable each model/perspective is for explaining the spread of different "things."

Part C: Network methods

5. Your reading list includes work involving whole network methods of data analysis, including blockmodeling and exponential random graph models. Imagine you have access to whole network data of advice-seeking ties (i.e., each directed tie is a request for advice) for all employees of a medium-sized company. Briefly describe a research question involving these

whole network data. Then discuss the advantages and disadvantages of each of two kinds of whole network analysis to address this question. Compare and contrast what these two methods do and the ways in which they are useful. (Note: this is not a question about technical details of doing the analyses, but about the wider question of what the analyses can find).

6. Briefly describe a research question concerning egocentric networks. Discuss the advantages and disadvantages of different ways of collecting the egocentric network data this research question calls for.