

***The Human Network* by Matthew O. Jackson**

Some Discussion Questions:

Discuss some instances in which a behavior is mostly hidden or secret, and so the friendship paradox leads people to *underestimate* its prevalence. For example, why might celebrities—stars, politicians, or otherwise prominent people—want to *hide* certain behaviors? How might that bias people's perceptions of the fraction of the population that undertakes such a behavior. Which other sorts of behaviors might have similar features?

Consider a vaccine that prevents a person from spreading a disease but offers no protection against catching the disease. Discuss how effective the vaccine would be compared to a vaccine that protects against catching but not spreading a disease. What additional issues might there be in terms of externalities of such a vaccine compared to a vaccine that immunizes someone against catching a disease? What are the incentives to become vaccinated?

Bengt Holmstrom, an economist at MIT and Nobel Laureate, has suggested that transparency in financial markets is not always a good idea. One analogy he has made is as follows. When you step into an elevator, there is a small certificate that indicates that the elevator has been recently inspected and was considered to be safe for operation. The certificate does not tell you that during the last inspection the main cable was found to be frayed and the emergency stopping mechanism was not working and that both were repaired. Suppose each elevator had a full history of past issues and repairs posted inside the elevator. How would you react? Similarly, when your plane is delayed for a new part, the pilot does not tell you that they had a small

electrical surge in the cockpit that burned out some of the instruments and led them to be replaced. What are the pros and cons of releasing partial or full information to the public about such things? What additional issues in terms of potential panics might be an issue when considering releasing information about the health of financial markets—such as whether some bank fails a ‘stress test’? What tradeoffs do you see between full information, partial information (for instance whether a bank passes or fails a test, but not why or by how much), and no information? If detailed information about financial networks and the exposure of different institutions was available, do you think it should only be made available to regulators or should it be made available to the public, or just to some select group of participants on a ‘need to know’ basis?

The crisis of 2008 and 2009 also had casualties of General Motors and Chrysler, which both went into bankruptcy. The US government eventually provided more than 80 billion dollars in subsidized loans and other direct support. Ford Motor Corporation avoided bankruptcy but also the bailout. Nonetheless, Alan Mulally, the CEO of Ford, testified in front of the US Congress in November of 2008 in favor of bailing out GM and Chrysler, two of its major competitors. Four years later he was to say, “If GM and Chrysler would’ve gone into free-fall they could’ve taken the entire supply base into free-fall also, and taken the U.S. from a recession into a depression.” Discuss his statement in light of the network of companies that provide parts (e.g., tires, airbags, electronics...) to many automobile manufacturers. How could have GM and Chrysler’s collapse have cascaded to hurt Ford? How could this have spread more widely to worsen the recession? What insights does this provide into the situation that is generated by shutting companies during a lock-down in response to a pandemic?

Bob Herbert of the New York Times describes the phenomenon of “Acting White” as follows: “Some African-American students, unable to extricate themselves

from the quicksand of self-defeat, have adopted the incredibly stupid tactic of harassing fellow blacks who have the temerity to take their studies seriously. According to the poisonous logic of the harassers, any attempt at acquiring knowledge is a form of “acting white” ” To explain this, David Austen-Smith and Roland Fryer observe that someone who studies hard is more likely to leave the community in the future. This makes the person a less attractive friend to someone who expects to stay in the community, as they will lose that person as a friend. Thus, they pressure the person to not study nor invest in other behaviors that might lead them to leave the community (to not ‘act white’). By ‘acting white’ the person risks losing his or her current friends for an unknown outcome in the future. Describe how this force plays a role in homophily, not just among African Americans but in all communities around the world. Under what sorts of circumstances is this most pronounced?

When you see a sign for a political candidate that has been posted by your friend or neighbor why does that convey different information from an advertisement on a billboard? Discuss this in light of homophily, and not just a friend’s endorsement. Why are referrals powerful marketing devices?

How do the algorithms on social media platforms that suggest friends and connections play into exacerbating homophily, the friendship paradox, and rich-get-richer effects? What other distortions might they induce in who pays attention to whom? What are policies that can counteract these effects? What are the incentives of the platforms to design such algorithms?

Warren Buffet has been quoted as saying “Failing conventionally is the route to go; as a group, lemmings may have a rotten image, but no individual lemming has ever received bad press”. Keynes even went one step further in his thoughts on the subject, as he states in the General Theory (chapter 12): “Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally.” Discuss the incentives of people—especially managers, coaches, and leaders—to follow what others commonly do even when they know of a better alternative. What are the tradeoffs of giving them a safe position from which they can follow less conventional strategies?

The Human network emphasizes that we are experiencing two forces at the same time. One is that technology is making our networks denser: we can interact with more friends, more often, and at greater distances. At the same time technology is making it easier to choose with whom we interact, what we read, hear, watch and show to our friends. This selection is enhanced by algorithms that detect our tastes and match us with content and people with whom our interests, preferences, and beliefs align. Thus, there are forces pushing us to become more connected, and yet more segregated at the same time. Discuss some of the consequences of the combination of these forces. What are the consequences for politics and opinions? Do you think cultures across the planet will remain distinct or converge over time?