

Lecture 3, Sep 15, 2022

Actor Network Theory Goals

- Goals: breaking the sociotechnical dualism (technology and society are not necessarily separate things), and making the invisible visible (technology is not just a gadget)
- Transitional approaches to the study of technology:
 - Technological determinism: Technology develops in a fixed sequence and imposes characteristics on society
 - * Technology as a gadget – there is something inherent to it that impacts society and individuals
 - * Example: Zoom
 - Inherent traits: low cost of reproduction, non-rival (doesn't get used up), taps into a global network which affords it usability – demands participation
 - Specific features: participant list, annotation, institutional account – refuses anonymity
 - Mute feature – refuses participant autonomy
 - Technological features of zoom influences the organization and relationships and activities of a class
 - Social construction of technology: Social groups shape technology
 - * What matters is not technology itself, but the socioeconomic system it is embedded in
 - * Example: Zoom
 - Grew from 10 to 200 million daily users in 3 months, based on human demand
 - Expanded to educational need (from mostly business), based on a human decision that was made
 - Broader set of users using technology in a myriad of ways
 - Technological momentum: Individuals and groups direct the development of new technologies, but investment in large sociotechnical systems makes them difficult to change
 - * Initially society creates and influences technology as a gadget, but when it gets big it influences society and cannot be changed (except for innovation around the edges)
 - * Reconciles TD and SCOT
 - * Example: Teaching has always been the same; only limited innovation around the edges, e.g. better spaces like Myhal, mentimeter
 - Problems: Both TD and SCOT move only in one direction, doesn't acknowledge the interactions between the two; divides the social and technical
- Political: Arrangements of power and authority in human associations and the activities that take place within these arrangements

Actor Network Theory

- ANT views technology as an actor within a web of actors; the interactions produce meaning
- Looks at structure, relationships, and power
- What shapes human choices? The structure/agency divide:
 - Structure: the arrangements in our society, material or cultural, shapes our choices
 - Agency: humans act independently, free choice
- ANT puts humans and nonhumans together in a series of relationships
 - Nonhuman actors can be conceptual or artifacts
- Everything is generated by the interactions between actors
- Any node in the network can be expanded into its own network
- Artifacts mediate interactions between humans
- Human actors are not prioritised over nonhuman actors (generalized symmetry)
 - For both, power is generated through the network itself
 - ANT alone is not an ethical analysis, but it can be used to analyze power relations that lead to ethics
- ANT is a method; it does not provide you with an answer