

Constructing the Digital Object of Study

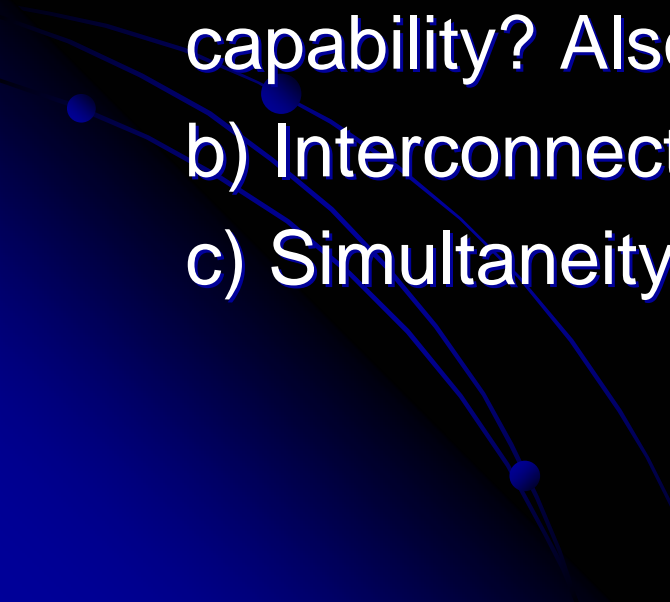
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Construct an object of study that takes the tech. seriously

- Project confined to computer centered interactive technologies. (Stabilizes meaning of technology, without denying that “technology is indeterminate/mutation prone/socially shaped
- Two sets of constraints:
 1. Go beyond the “impacts of” approach- avoid tech. determinism. Recognize the emergence of whole new domains (e.g. open source communities, grid for scientific collaboration). IT is not only a tool; such electronic structures contain endogenized social logics that will vary for different domains
 2. Factor in the mutating capabilities of these techs.

Factoring in the multiple capabilities

- For interactive domains we can identify three:
 - a) Decentralized access/Distributive outcomes: in many ways a type of enhanced aggregation. A common conceptual point of entry into ITCs.
(Much of the work on scale up still rooted in this capability? Also problem of generalizability?)
 - b) Interconnectivity
 - c) Simultaneity
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Selecting cases that reflect all three — “natural experiments”

- We proceeded inductively, taking cases that functioned as natural experiments and trying to conceptualize in ways that abstract from the specifics of each case (itself a type of scale up):
The cases: early conflict warning systems, open source software development communities, very large scale Internet based conversations, electronic financial markets, internal communication systems of large multinationals, electronic activist networks.

Factoring in social logics

- Three elements:
 - a) imbrications between IT and social (broadly understood) contexts
 - b) Mediating cultures (not just technical competence or questions of access). Pre-existing cultures: can become cults. of use.
 - c) scaling (many different forms: e.g. in financial markets we see a new type of risk, market risk -a network effect; various types of feedback; effects of expanding a program.

1. Imbrications of digital and non-digital conditions

- a) Producing hypermobility and digitization requires material resources
- b) Material conditions themselves are also altered, e.g. building represented by a hypermobile fin. instrument is no longer the same building.
- c) Path dependencies (imbrication of digital and non-digital as a chain of sequences that creates but also eliminates possibilities).

2. Cultures of Use, including those unrelated to ICTs

- Mediating cultures/practices :
 - Not just a question of access to and use of these technologies---the dense environments within which users or potential users work, live, etc. can have a shaping influence.
e.g. highschool ..., traditional scholars of the Khoran using hypertext.....
 - Organizational complexity alters results/outcomes of use.....e.g. fin. Exchange vs. public library: same cable/diff use; different path dependence.

3. Rescaling

- Destabilization of older hierarchies of formalized power, authority: local, regional, national, (in some cases: supranational). Implications for state, IR
- Stronger presence in cross-border relations of “scales” that once were local or subnational: e.g. urban actors, microenvironments with global span.
- Global scale is strengthened.

Socio-Digital Formations

- Electronic structures (structurations) that reflect both technical capabilities and endogenized social logics.
- Thus: not all digital networks are such formations. Data pipe lines..
- Yes, all technologies are “society frozen.”
But within a given space and time they are also distinctive conditions/capabilities.

Two cases where digitization has been transformative/constitutive

- Key aspects of global financial market today (which makes it different from earlier phases of global finance): orders of magnitude, centrality of transactivity, level of complexity of instruments (software). Has given Fin. Enormous added power over govts.---a new normativity..
- Resource poor-organizations can become part of global politics in ways that construct a politics of the global centered on localities. Non-cosmop.

Parallels between both cases

- Key features of digitization are critical in these two very different cases (tech.properties provide the utility in both cases).
- 1. Decentered (distributed) participation/outcomes and simultaneous integration. But achieved through different socio-economic encasements of the technology: public access, private/dedicated
- 2. Threshold effects are critical in both
- 3. Values, projects, applied outcomes are different: distributed power-concentrated power

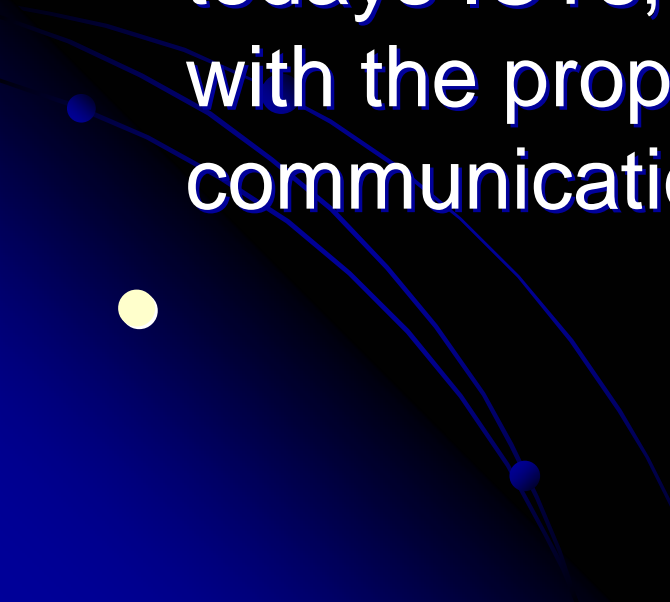
ITCs: Mutant Technologies. Organizational & Discursive Shifts

- ITCs themselves mutate as they migrate between contexts, and get assembled and re-assembled into diverse formations.
- This points to the possibility and likelihood of additional mutations. Thus propositions developed in research about these technologies need to be subjected to critical re-examination, and frequently so. Such re-examinations also allow us to detect recurrent and contingent patterns.
- The fact itself of mutating formations may indicate that it might be easier to know more about the technical properties of these technologies than about the interactive domains within which these properties become performative.

CSOs: The need for new formats to maximize ICTs utilities

- The engagement of CSOs with an increasingly networked transnational space articulated by ICTs, illuminates at least two critical conditions (and their mutations) in that ICT articulated space.
- One is the settings within which these technologies get used by CSOs. Settings are a feature insufficiently addressed in the pertinent research which has tended to focus on (disembedded) technical properties and the discursive practices of users. Prominent settings for CSOs today are neoliberal corporate contexts, supranational organizations, and normative orders dominated by older legitimacies, such as human rights politics and nation-based citizenship

Continuing...

- The settings within which CSOs tend to function introduce a variety of formats (demands for accountability, adjustment to institutional dynamics which preceed todays ICTs, and so on) that do not align with the properties of networked communication technologies.
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Continuing....

- This mis-alignment explains the disappointing outcomes for CSOs that have used these technologies in such settings. One prominent example is the WSIS initiative. In this sense formats derived from the politics of liberal democracies centered in nation-states (representation, nation-based citizenship) do not quite fit networked communications. The latter deborder the political formats of today's nation-state based liberal democracies.

Continuing....

- The second is the extent to which there is no necessary correspondence between certain technical features (notably openness and distributed outcomes) and equality, or at least tendencies towards equality. Show us the limits of the convergence of a) technical properties that enable decentralized access and free choice, and, b) outcomes that contribute to equality – equality of voice, of participation, of representation and so on.

Openness and choice can produce power law distributions

- Going against the grain of much of the general literature on networked communications, is the strong tendency for the combination of open networks and multiple choices to produce power law distributions (given a certain numerical threshold of participants and choices).
- Presence (not easily legible) of hierarchies precisely in the most open and least organized networks. The meaning of this distributional tendency is clear: network openness does not necessarily produce equality in the resulting distribution.

Interactions between “technical” and social logics

- The social logics of users alter the technically possible outcomes: As those social logics become endogenized in the interactive digital network they “distort” the engineer’s design, so to speak. The assemblages constituted through technologies and users/social actors constitute digital formations that do not necessarily conform to the technical designs of the hardware and software involved. (Again: we suspend the indeterminacy of the technology here).