Knowledge Sharing and the Idea of Public Domain

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What is knowledge?

• This is how we usually think it is:

Yield = intellectual dividends per effort invested

source: G. Pör
Data is more than knowledge

Interpretation requires shared knowledge

Knowledge (person 1)

Knowledge (person 2)

articulate, verbalize, add structure

make sense & try to figure out

Data

Information

Trust

Knowledge (person 1)

Knowledge (person 2)
The Social Foundation of Knowing and Knowledge Creation

- M. Bakhtin (1930’s): linguistic “genres” and “chronotype”
- L. Fleck (1935): “thought communities”
- D. Schön (1983): “communities of reflective practitioners”
- Y. Engeström (1987): “activity systems”

Knowledge is practice-related and activity-oriented
- articulated in a social process,
- learned through socialization,
- reflected in the conceptual systems that are used in interpreting the world,
- partially embedded in material and technical artifacts,
- and often not explicitly articulated
The 5-A model of knowledge creation

articulate  appropriate

"learn"

accumulate  anticipate

act
The basic paradox of intellectual property rights

• “Knowledge and cultural products are fundamentally social phenomena. Expression of the outputs of intellectual work makes these outputs visible to others. In this sense, knowledge exists when it is given away.”

• It is as impossible to have “private knowledge” as it is to have “private language”
So, why do intellectual property rights work?

• They work because they create closures in the underlying social structure. Some people are included, others excluded.
• The most important type of closure is the business firm.
• Knowledge can be shared inside the firm, and yet its movement may be restrained across the boundaries of the firm.
Where did exclusive intellectual rights come from?

• Open letters with the emperor’s seal: *literae patents*

• Granted in the 15\textsuperscript{th} and 16\textsuperscript{th} centuries for, among others:
  
  – Monopolies on selling salt, soap, leather, knives, iron, paper
  
  – Monopolies to conquer “any country, region, province, castle and village unknown to Christians and inhabited by infidels.”
Copyrights

• Twenty years after movable type printing press became a reality:
  – The first “copyright”: Venice granted John of Speyer the exclusive right to “print letters” in 1469
  – U.K. Licensing Act of 1662: to limit competition and to control books hostile to the Church or Government, monopoly for printing was given to the Stationer’s Company
U.K. Statute of Monopolies, 1623

- Rendered illegal all monopolies and grants of privilege, except those “for the term of fourteen years of under, hereafter to be made, of the sole working or making of any manner of new manufactures within this Realm to the true and first inventor and inventors of such manufactures, which others at the time of making such letters patents and grants shall not use.”

- Exclusive right to print books for fourteen years to the author of the book
- Could be extended for another fourteen years if the author was alive when the first period ended
- After that, the book became freely available for copying, i.e., it entered the “public domain”
Motivations for the Statute of Anne

- “for the encouragement of learned men to compose and write useful books”
- frequent copying without the consent of authors had led to their “great detriment, and too often to the ruin of them and their families.”
The U.S. Constitution, 1787

• “the Congress shall have the power…to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”
How exclusive rights become “property”

- Denis Diderot, hired by the Paris Book Guild:
  “What form of wealth could belong to man, if not a work of the mind…if not his own thoughts…the most precious part of himself, that will never perish, that will immortalize him?”

i.e., intellectual rights should be viewed as natural rights that belong to the creator (so that she could give them away) and they should be eternal (so that the rights given away would not enter the public domain)
The balance

- Monopolies are usually bad
- If they promote learning and progress, exceptions can be made, for a limited time
- Intellectual rights promote progress because they help the men of knowledge to publish useful books and invent without the risk of ruining themselves and their families
- Eventually, the knowledge, however, needs to be made widely available, so that it can provide the foundation for the creation of new knowledge, and so that it can be widely used in the society
Did the theory work?

• Is more knowledge created because there are intellectual property rights?
• Did exclusive rights increase the amount of useful knowledge in the public domain?
• Are authors and inventors better off?
• Did historically important innovations and scientific progress require intellectual property rights?
The political dimension of public domain

- Public domain underlies the knowledge society
  - In Arend’t analysis, *polis* is the public space where the free men of Athens become political members of the society. The households and its *oekonomia* (the art of good management of household) define the private space where life is maintained and reproduced.
  - The modern state becomes increasingly involved in managing the private space, at the cost of the shrinking of the domain of polis; in this historical process, free men become slaves of public economy.
Habermas and discourse ethic

• Modern printed media transform societies by creating a domain of communicative *public sphere*, where the citizens express opinions, articulate their disagreements, and formulate common projects.

• Rational argumentation is the basis of articulating differences and creating an ethically sound society.

• This process requires transparent access to information and knowledge.
Why the political dimension is relevant?

• Innovation is *not* about creating new technical devices or making novel discoveries.
• Instead, innovation occurs when new technologies and knowledge become meaningfully integrated in social practices.
• As a result, all innovations are social innovations.
• Therefore, all new technologies imply revolution in social relations.
• And, in reverse, social change is often implemented through technical designs.
• This means that innovation is inherently a political and ethical process.

Summary

• Knowledge is a social phenomenon, embedded in communities that share and reproduce specific forms of expertise and social practice
• Public domain is *both* a legal-economic and political concept
• The functioning of the intellectual rights is empirically an open issue; we do not know whether they lead to progress and development
• Even if they would work, we still have to consider the political and ethical dimension of knowledge sharing
Final: the standard disclaimer

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