Digital Literacy & Privacy Self-governance: A Value-based Approach to Privacy in Big Data Ecosystems

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Introduction

‣ In 2009, EU commissioner Meglena Kuneva called personal data "the new oil"

‣ In 2011, a report by World Economic Forum defined personal data as a new economic "asset class"

‣ Data mining and big data providing the technical skills to "fuel new economy"

‣ Estimates for the monetary value of personal data range from few cents per piece of info to +$5000 for a digital profile

‣ Current presentation

   ‣ A grounded theory analysis of trade articles in 2012 and 2013 focusing on big data, interactive marketing and privacy

The Individual and Big Data

Imagine if we deeply understood that user, how that information could better serve them? We haven't given users a place to tell us things like who they are, who they know and what they care about. When that information can be put into service to the user, we can provide a better quality of product across everything we do-we can build a better browser, a better phone and, yes, we can serve better ads.

Product Vice President of Google+, Bradley Horowitz

Obviously, this hinges on the users wanting this functionality and opting in. Once they do, we can start providing really interesting answers to users that right now are accustomed to asking for

Vice President of Android, Hiroshi Lockheimer

Privacy as Self-Management

▸ Privacy, Markets, and Individual

   ▸ Privacy as 'control' over data

   ▸ Privacy as 'commodity'

   ▸ (EU & US) Creation of a market for privacy

   ▸ Individuals as privacy pragmatists who value privacy yet are increasingly "comfortable with the idea of giving companies their data when they feel they are getting a valuable service in return"

▸ Two components of consumer awareness emphasized in trade literature

   ▸ Need for transparency and better "consumer education" because consumers do not know the options that are already available to them...

   ▸ Consumers need a little push in the "right direction"

      ▸ Fears about privacy are "prompted by the irrational fear that if a company is asking for their data it is because it wants to use it against them" (Barnett, 2012)

'Networked Individualism'

- Celebratory rhetoric about cybersociality and online presence
  - Liu (2007): modular structure of social media empowers individuals to go beyond traditional tokens of identity
  - Rainie & Wellman (2012): rise of networked individualism
    - A new 'social operating system' providing individuals with new forms of
      - Socialization
      - Collaboration
    - At the center is the 'autonomous individual' who can use this social operating system to fashion "their passions, beliefs, lifestyles, professional associations, work interests, hobbies…"
- Individual Identity, Disclosure, Social Media Participation
  - Fisher (2012): While social media intensify exploitation of audience labor by requiring users to engage in self-expression and "collabouration" with others, it promises de-alienation by allowing individuals to have more control over the presentation of themselves

Privacy and Identity

- Rhizomatic nature of data leads to low ratio of the self to the surveillance (Marx 2004)
    - Whereas individuals are only aware of their micro-actions and their consequences, the data, out of context, can be arranged to create different meanings.
- 'Stoic neutrality' of big data analytics (Andrejevic, 2007)
    - As Julie Cohen (2013) argues, for big data ideology, quantitative data represents the utmost expression of 'truth'
    - It is free from the so called bias of the 'human'

The theory of big data is to have no theory, at least about human nature... People using big data are not like novelists, ministers, psychologists, memoirists or gossips, coming up with intuitive narratives to explain the causal chains of why things are happening

Contrary to conventional wisdom, such human intuiting of causality does not deepen our understanding of the world

Mayer-Schönberger & Cukier

The Self and the Big Data

- Hermeneutics of the self and self-disclosure (Foucault, 1980):
    - Greek and Roman techniques of the self, the self is not seen an obscure text the hidden truth about which is to be discovered
        - The goal is not to bring to light what would be the most obscure part of our selves but to constitute oneself.
    - Conversely, in the techniques of self-hermeneutics in Christianity, which Foucault characterizes as the predecessor of Western hermeneutics of the self, the act of confession was about uncovering what is hidden;
        - The more a person hesitated to disclose the more it would be seen as a moral proof that his/her actions had evil in them.
        - The spiritual master was endowed with the authority to guide the individual, who is permanently obedient to the master, about the truth regarding himself/herself
- 'Algorithmic Truth' and the constant recontextualization of the self.
    - Equifax data gurus certainly spend time de-duplicating and cleansing data they integrate from public and private sources, but they've stopped fretting about finding and storing one definitive view of a consumer. Context is more important. "The reality is, they're all right. Now we think of observations more than truth," (Nash, 2012)

Data brokers have access to a wealth of personal information, including estimated net worth, religious and political affiliations, children's names, websites visited, articles read, and photos posted of consumers and their families. This information is available to employers, insurance companies, and individuals willing to pay a small fee. Such practices leave individuals susceptible to inaccuracies that can result in damaging assumptions about a person's history, reputation, and character. It can also be dangerous or even life-threatening for those targeted by stalkers or abusers, and people working in a vulnerable field, like law enforcement.

Abine (2012), DeleteMe Press Release.

A hierarchy of privilege regarding personal information should be observed dependent on the needs of the service... [A] social networking site may ask for occupation, high school, and place of birth when creating a profile. If patrons don't want to be associated with their places of birth, they must consider that the service is asking for this information in order to facilitate public searching and finding. This consideration of why a service is requesting information, how it will reasonably use the information, and if it is necessary to gain access will go far toward protecting the user's privacy. The end result may be a much fuller view of users' personal lives than they consciously disclosed in each separate setting. By being aware of this eventuality, patrons can actively consider how and what they are comfortable sharing around the web.

Cirella, David (2012), Beyond traditional literacy instruction.

Awareness Paradox

‣ Market dominated by privacy policies that adopt `take-it-or-leave-it'

‣ Consolidation of cloud service providers

‣ What does it mean to be aware of the eventuality of what happens to one's profile?

‣ Withdrawal from the digital marketplace

    ‣ Kosinski, Stillwell, and Graepel (2013): Heightened awareness of how is utilized may deter engagement in digital environments

    ‣ The withdrawal of the privacy-risk-aware segment from the marketplace will reduce the availability of signals that the actors in the marketplace are supposed to rely on to determine, and then ideally compete to accommodate, consumers' reasonable expectations of privacy.

    ‣ The marketplace creates a self-fulfilling prophecy about the existence of a privacy pragmatic consumer base willing to give up privacy in exchange for benefits because population segments who would signal otherwise are no longer in the market to do so

‣ Microlistening, political campaigns and awareness paradox