TRANSACTIONAL TIMES: HUMAN VALUES AND THE ASSAULT OF THE DIGITAL

SHEILA JASANOFF HARVARD UNIVERSITY RATHENAU INSTITUTE THE HAGUE NOVEMBER 9, 2017



We have always been inventors.

How has invention changed?

Which enhancements do we wish to advance for the public good?

How do we prevent undesired consequences?

Who decides?

THE GOSPEL OF DISRUPTION

"YOU NEVER CHANGE THINGS BY FIGHTING THE EXISTING REALITY. TO CHANGE SOMETHING, BUILD A NEW MODEL THAT MAKES THE EXISTING MODEL OBSOLETE."

- BUCKMINSTER FULLER

CYBER-INDEPENDENCE



Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.

John Perry Barlow



Forbidden Planet: Monsters from the Id

Mr. Clarke, who makes his home in Sri Lanka, said last week that nothing has happened

since the making of "2001" to persuade him that his vision was fundamentally wrong. In a telephone interview he said that every capability attributed to HAL -- a system that can speak, listen, reason, criticize human art and at one point even read lips -- has been shown to be at least theoretically possible.

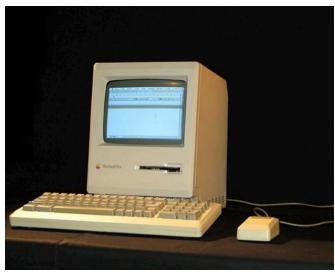
"A lot of people are still arguing about this," he said. "But I have no reason to doubt it."

INTELLIGENT MACHINES













Thanks to Venmo, We Now All Know How Cheap Our Friends Are

By rendering payments between friends nearly invisible no cash changes hands, no checks are written — Venmo theoretically should make these relationships *less* obviously transactional. Yet not only does it encourage pettiness, distilling the messiness of human experience down to a digitally precise data point, but by making it so easy to pay someone back for purchases as trifling as a coffee, the app arguably promotes the libertarian, every-user-for-himself ethos of Silicon Valley.



Inapervasívely dígítízed world what reasonable approaches do we have to protecting human values?

TWO GOVERNANCE PARADIGMS RISKS AND RIGHTS

RISKS

Implied commitment to technology adoption – but not at *any* cost

Focused on harms – to persons, groups, environments

Dependent on expert assessments – indicators, statistics, probabilities

Policies of control containment, mitigation, adaptation

RIGHTS

Implied starting point in human needs and wants as publicly defined

Focused on freedoms – to accept, reject, shape according to societal norms

Dependent on enforcing institutions - national and international law

Policies of emancipation – declaration, codification, universalization

FOURTH AMENDMENT

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

KATZ v. UNITED STATES (US SUPREME COURT 1967)



Illegal gambling wagers being telephoned from LA to Miami and Boston

Wiretap of phone booth

No physical intrusion

No search warrant

Violates 4th Amendment?

7-1 decision in favor of Katz

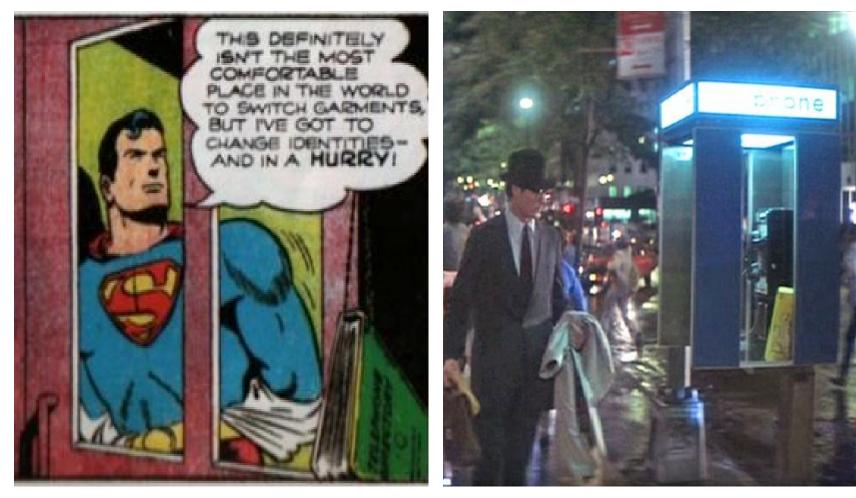
JUSTICE HARLAN'S CONCURRENCE

"(a) that an enclosed telephone booth is an area where, like a home, and unlike a field, a person has a constitutionally protected reasonable expectation of privacy;

(b) that electronic as well as physical intrusion into a place that is in this sense private may constitute a violation of the Fourth Amendment; and

(c) that an invasion of a constitutionally protected area by federal authorities is, as the Court has long held, presumptively unreasonable in the absence of a search warrant."

TECHNOLOGICAL CHANGE



SPACES: PUBLIC AND PRIVATE

Public spaces

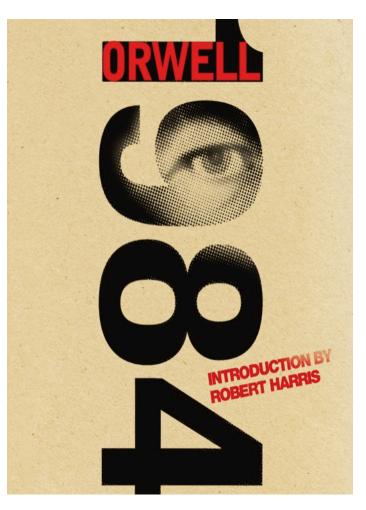
- Fields
- Streets (J. K. Rowling photograph case)

California v. Greenwood (1988)

"It is common knowledge that plastic garbage bags left on or at the side of a public street are readily accessible to animals, children, scavengers, snoops, and other members of the public."

A 1984 WORLD?





GPS CASE: US v. JONES (2012)



Drug trial of Antoine Jones

28 days of secret tracking of Jones via GPS device on Jeep

Trial on conspiracy to distribute drugs

Sentence: life imprisonment

JUSTICE BREYER IN JONES

"If you win this case then there is nothing to prevent the police or the government from monitoring 24 hours a day the public movement of every citizen of the United **States.** And no one, at least very rarely, sends human beings to follow people 24 hours a day. That occasionally happens. But with the machines, you can. So if you win, you suddenly produce what sounds like 1984."

Major Ruling Shields Privacy of Cellphones

Supreme Court Says Phones Can't Be Searched Without a Warrant

By ADAM LIPTAK JUNE 25, 2014

"This is a bold opinion," said Orin S. Kerr, a law professor at George Washington University. "It is the first computer-search case, and it says we are in a new digital age. You can't apply the old rules anymore."

Chief Justice John G. Roberts Jr., writing for the court, was keenly alert to the central role that cellphones play in contemporary life. They are, he said, "such a pervasive and insistent part of daily life that the proverbial visitor from Mars might conclude they were an important feature of human anatomy."

WHY REGULATION IS NOT ENOUGH...

- Presumes more capacity, epistemic and managerial, than states typically have
- Bureaucratic inertia, tunnel vision, capture
- Keyed to market, hence often too late and too product-focused
- Usually national in scope, hence inadequate for challenges of globalization unless coupled to processes of internationalization
- Embedded in social values

SOCIOTECHNICAL IMAGINARIES

Definition:

"Collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology"

COMPARING NUCLEAR IMAGINARIES

	United States	South Korea	Germany
Framing Risks	Runaway accidents; catastrophic damage	Energy security; dependence	Irresponsible and catastrophic damage
Stakes	Governance of technology	Governance of nation	Governance of state power and risk society
Policy Focus	Controlling radiation	Building national capacity	Increasing transparency
Controversies	Quantitative expert risk assessments	Political inclusion and participation	Inaccessible expert risk assessments
Closures	Court cases; nationalization	Management structures	Political mobilization; legislation

WHY MARKETS ARE NOT ENOUGH...

- Product focus: too little, too late
- No room for ambivalence: early entrants shape market
- Limits values to those of market:
 - efficiency over intensity of preference
 - Economy over environment
 - change over cohesion
- Forgetful instrument: leaves failures behind and does not learn well

DISRUPTION REVISITED



Disruptive Innovation describes a process by which a product or service initially takes root in simple applications at the bottom of a market—typically by being less expensive and more accessible and then relentlessly moves up market, eventually displacing established competitors.

TENETS OF DISRUPTION

Enabling Technology

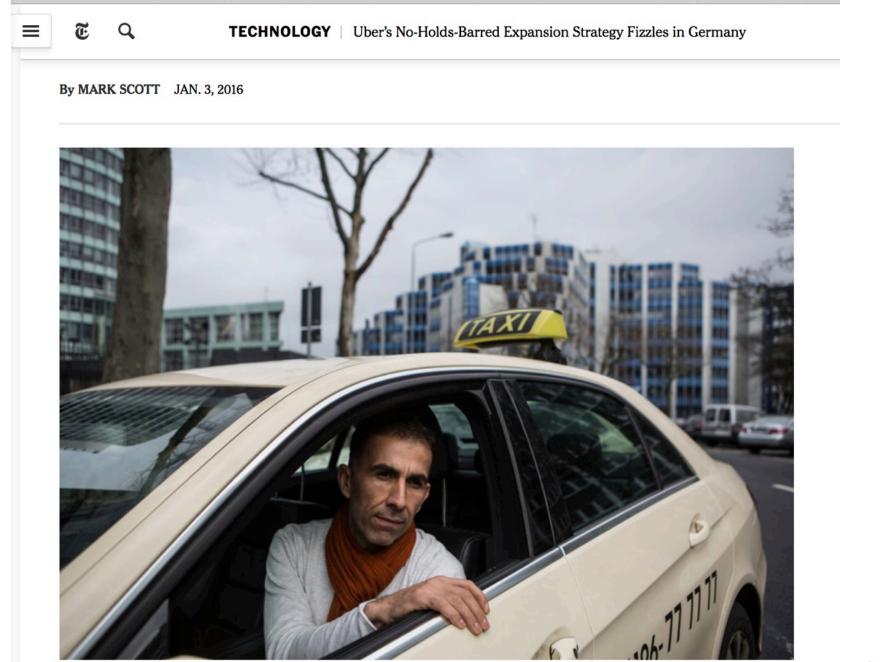
• An invention or innovation that makes a product more affordable and accessible to a wider population.

Innovative Business Model

 A business model that targets nonconsumers (new customers who previously did not buy products or services in a given market) or low-end consumers (the least profitable customers).

Coherent Value Network

 A network in which suppliers, partners, distributors, and customers are each better off when the disruptive technology prospers.



In Frankfurt, Uber met resistance from current taxi operators like Hasan Kurt. "It's not part of the German culture to do something like" what Uber did, he said. Benjamin Kilb for The New York Times

With a thriving financial center and cosmopolitan population, the city seemed like an ideal place for Uber to operate and grow. Yet the company was forced out by a mix of cultural and legal missteps. Specifically, it miscalculated how best to gain the support of skeptical locals unaccustomed to its win-at-all-costs tactics, and it underestimated the regulatory hurdles of doing business in Europe's largest economy.

Mark Scott, New York Times, January 3, 2016

WHY EVEN ETHICS IS NOT ENOUGH...

- Privatizes questions of value
 - Individualist values (e.g., bodily integrity) privileged over collective values (e.g., inequality)
- Turns public values into expertise
- Often not mandated by law, hence with uncertain impacts on national and international policy
- Tends to incorporate presumptions in favor of research and development, even if questionable



"The priest says 'lift up your hearts.' He does not say, 'lift up your cell phones to take pictures," Pope Francis said. "It's a bad thing! And I tell you that it gives me so much sadness when I celebrate here in the Piazza or Basilica and I see so many raised cellphones, not just of the faithful, even of some priests and even bishops."

Many pilgrims try to get pictures of the Pope at his audiences



TECHNOLOGIES OF HUMILITY -RESTORING RELATIONSHIPS

Framing

• What other ways can the (policy) questions be posed?

Vulnerability

• Who is most likely to be hurt?

Distribution

• Who loses and who wins?

Learning

• How can we learn (and forecast) better?



Thank you!