

Introduction: In search of "information"

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Itinerary, 1/22

Geoff:

Subdividing academic space What's the *i* doing in iSchool? Confusion about "information" Paul: Preview of the course



What puts the *i* in iSchool?

Why not the eSchool, v-School, cyberSchool...?

The question everybody learns to duck: "you're in the School of Information ... so what is information?"

Professor of ____?

WELCOME TO THE iSCHOOL





What puts the *i* in iSchool?

What does it mean to be a "school of information"? Is it computer science or library science? Is it social science, law, or business? Is it information architecture or multimedia design? Are we pioneering the next big navigation tool? Or are we concerned with "the human element" of information: how it connects, separates, affects people?

The answer to all these questions is "yes," because the study of information — how it is created, shared, and transformed into actionable knowledge — touches a wide range of issues and disciplines, just as it addresses the vast diversity of human needs, activities, and relationships.

AnnaLee Saxenian, Dean's statement

WELCOME TO THE iSCHOOL





The roots of academic geography





Subdividing "subject matters"



Tree of Knowledge, title-page of R. Lull, Arbor Scient 15: rpr. 1635): copy in Cambridge University Library (P The varieties of academic organization; fields built around: Professional/institutional practice: education, journalism Organizational roles: marketing, management, Technologies: pharmacy, CS, nuclear engineering Intellectual traditions: philosophy, comparative literature Human faculties: psychology, linguistics... "Natural" domains: chemistry, genetics...

But like other 'trees of knowledge', this is arbitrary and reductive.



"In the republic of letters, a man can live as himself, but in the bureaucracy of letters he must continually declare his style and department, and submit to an examination of his purpose and credentials at the frontier to every field." Raymond Williams

How "fields" are defined:

By subject matter: Xology = "the study of X" (art history, Italian, ophthamology, etc.)

By institutional setting (e.g., as schools, departments, majors, programs, etc.)

By markets (e.g., who hires/funds whom?)

By literatures and curricula (e.g., canonization of course structure)

By formal systems of classification (catalogues)

By formal associations (prof. societies, funding sources, crossinstitutional relations, etc.)

By sites of discourse (journals, conferences, informal rules)

By rhetoric/ language







How "fields" are defined:

What circulates between contemporary philosophers... is not only canonical texts. but a whole philosophical doxa carried along by intellectual rumour — labels of schools. truncated quotations, functioning as slogans in celebration or polemics - by academic routine...which perhaps do more than anything else to constitute the "common sense" of an intellectual generation.

Pierre Bourdieu, "The Field of Cultural Production," 1983





An intellectual discipline exists when a number of persons believe themselves to possess an identity defined by the common subject of their intellectual activity, when many or all of the problems which they study are raised by or derived from the ...body of literature and oral interpretation produced by those who regard themselves as practitioners of the discipline. ...When its members publish works in organs bearing the name of the discipline, a discipline has an intellectual and social structure.

Edward Shils, 1982



The challenges of interdisciplinarity:

Cf the experience of cognitive science, communications, social relations, media studies, cultural studies, American studies...

A passel of prefixes: inter-, cross-, trans-, multi-...



The Scope of "information"

BusinessWeek

It's not something we can see, really. We certainly can't touch, taste, hear, or smell it. Yet it's always there when we look for it, available wherever we bother to direct our attention. We can glean it from the pages of a book or the morning newspaper and from the glowing phosphors of a video screen. Scientists find it stored in our genes and in the lush complexity of the rain forest. The Vatican Library has a bunch of it, and so does Madonna's latest CD. And it's always in the air where people come together, whether to work, play, or just gab.

What is it that can be so pervasive and yet so mysterious? Information, of course...

John Verity, Business Week, "The Information Revolution," 1994



BusinessWeek

Pronoun trouble

... it's always there when we look for **it**, available wherever we bother to direct our attention. We can glean **it** from the pages of a book or the morning newspaper and from the glowing phosphors of a video screen. Scientists find **it** stored in our genes and in the lush complexity of the rain forest. The Vatican Library has a bunch of **it**, and so does Madonna's latest CD. And **it's** always in the air where people come together, whether to work, play, or just gab.

What is **it** that can be so pervasive and yet so mysterious? Information, of course.

But whatever it is...



... it can effect mighty changes

BusinessWeek

What gives computers such awesome potential to reshape the world? For starters, all technologies that "process information" ... affect deeply the societies that use them. Johannes Gutenberg's printing press eventually helped reformers to erode the Catholic Church's political power: Books spread knowledge in ways the Vatican could not control....But the world has never seen anything like the computer.



The newest new order...

...we're inspired by technologies that have revolutionized how people spread and consume information. We often talk about inventions like the printing press and the television — by simply making communication more efficient, they led to a complete transformation of many important parts of society. They gave more people a voice. They encouraged progress. They changed the way society was organized. They brought us closer together.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

on Education 1, 2012

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The scope of "information"

Is information monosemous (one mng)

E.g., *structure* (OED): The mutual relation of the constituent parts or elements of a whole as determining its peculiar nature or character

Vague or general?

We may compare a vague word to a jelly and a general word to a heap of shot. Bertrand Russell

...ambiguous? (several words, diff. meanings) bank, duck, etc.



The scope of "information"

...polysemous (one word, several related mngs)

E.g., gossip (activity, person, content); terror (emotion, that which elicits emotion, activity...); news (Did you hear the ____/listen to the ____?")

"Consider for example the proceedings that we call "games". I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all? ... if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that." Ludwig Wittgenstein, *Philosophical Investigations*

"Your values are different; for instance, she has them." (Win a Date with Todd Hamilton)

(more on this next week...)



One word or many?

Popular (folkloric) vs. technical/scientific conceptions of information — but lines are fuzzy

- "Information" as a category of everyday discourse Can you give me some information about dehumidifiers?
- "Information" in public discourse & policy, education, journalism (~haves/have nots; ~ technology, freedom of ~, etc.)
- "Information" as a theoretical notion in philosophy, information theory, CS, cognitive science & linguistics, informatics... (Tofl producers)

Also in economics, political science, public policy, business & management, etc. (Tofl consumers)

- "Information" as a theoretical notion in genetics, biology, physics, etc.
- ... and each influences the others...

One word or many?

The historical rise of Later on... How did "information" become a central, selfconscious category in modern thought?

'information'



Assignment for 1/24

Pick a word or phrase that does a certain amount of ideological or explanatory work in the rough area of "information"—e.g., big data, open source, crowdsourcing, user-centered, social media, 2.0... (but not pure marketing hype like "viral," "passionate" "ripple effect" or essentially technical notions like "malware," "distributed processing," etc.)

Pull down a bunch of citations for the item from the Web or Google News, and see if you can sort them into distinct uses or senses à la *information*. You don't have to hand them in; this is prefatory to the assignment for next Tuesday's discussion.