UC Berkeley School of Information

Introduction:
In search of "information"

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IS 218

Concepts of Information

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Itinerary, 1/19

Geoff:

What's the *i* doing in iSchool?

Confusion about "information"

Dimensions of variation in definitions of information

What are we talking about when we talk about information?

Paul:

Getting a handle on information…. or not.

Review 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?"

WELCOME TO THE iSCHOOL

Exploring the future of information

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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

Exploring the future of information
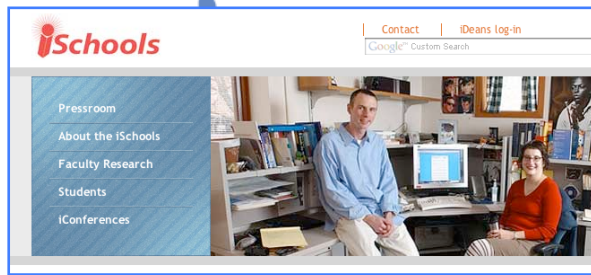
What puts the *i* in iSchool?

"Information" unifies & legitimates the iSchool movement

> The iSchools are interested in the relationship between information, people and technology. This is characterized by a commitment to learning and understanding the role of information in human endeavors. The iSchools take it as given that expertise in all forms of information is required for progress in science, business, education, and culture. This expertise must include understanding of the uses and users of information, as well as information technologies and their applications.
>
> iSchools Caucus at www.ischools.org

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The Scope of "information"

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…

Business Week, "The Information Revolution," 1994

The Capacious Scope of "Information"

All technologies that "process information" (although they were never described in those terms in the predigital era) 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.

Business Week, "The Information Revolution," 1994

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What does "it" refer to?

Different concepts or different conceptions?

Is *information* monosemous, polysemous, or ambiguous?

Dimensions of variation in conceptions of Information

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 discussions of public discourse & policy, education, journalism

- "Information" as a theoretical notion in philosophy, information theory, CS, cognitive science & linguistics, informatics, economics, political science, public policy, business & management, etc.

- "Information" as a theoretical notion in genetics, biology, physics, etc.

The Theory-of-Information Food Chain

A rough but useful distinction: TOI "Producers" and "Consumers" (Brian Smith)

TOI Producers:

> People concerned with "theories or inquiries that address information as a phenomenon in its own right, and who therefore bring forward specific theories about it. … people or theories or investigations that analyse what information is."

> I.e., information theory, philosophy, theories of computation, documentalists & information studies,

TOI Consumers (or "developers")

"People, theories, fields, etc.,… which employ the notion of information substantively but who more rely on information itself, or a concept of information, 'being available' for substantive use."

E.g., geneticists who theorize DNA as an information-carrier, psycholinguists who deploy information theory in studies of information processing, economists…

These theories may be "grounded" in a prior theory of information, linked to it, or rely on it, but usually wind up reinterpreting the notion for their own purposes.(GN)

The historical rise of 'information'

How did "information" become a central, self-conscious category in modern thought?

Popular conceptions of information

What makes something count as "information" for us?

Medium:

information often presumes a fixed medium of storage or transmission: information is "present" in the world. Information can be transferred from one medium to another.

Setting

Information usually belongs to public, commerical, or institutional life. Cf *Do you have any information about the party?*

Referentiality:

information is "about" the world

Veridicality/objectivity

Information is (usually) true. Information has the same meaning for everyone.

Quantization/measurability

Information comes in morsels; the quantity of information can be measured.