Infosys 103
History of Information

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Introduction: 8/28/06
What could "history of information" mean?

"History of X"

X= "Belgium," "America," "Britain"

X = "Art," "Fashion," etc.

We see the past through the lens of the present…
The Notion 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…

The meanings of "information"

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**Information as a technical notion**

Information as measurable stuff in the world...

Separated from, or without the implication of, reference to a person informed: that which inheres in one of two or more alternative sequences, arrangements, etc., that produce different responses in something, and which is capable of being stored in, transferred by, and communicated to inanimate things. *Oxford English Dictionary*

The word *information*, in this theory, is used in a special sense that must not be confused with its ordinary usage. In particular, information must not be confused with meaning. In fact, two messages, one of which is heavily loaded with meaning and the other of which is pure nonsense, can be exactly equivalent, from the present viewpoint, as regards information. (Weaver 1964)
The Uses of "Information"

"The i-School"

What do we assume when we hear…

Could you give me some information about the party?

The company spent $3 million on new information technology.

Information wants to be free...

An informed public/...the free exchange of information...

A daily issue of the New York Times contains more information than the average seventeenth-century Englishman came across in a lifetime.
"Information" blends technologies, media, etc.

The rivers of electronic 1s and 0s that computers create, move, process, store, retrieve, shape, and reshape, all with such ease, have become a universal language for machines—the basic "material" of the postindustrial era… Driving the changes … is the computer's ability to reduce all conventional information forms into one big digital stew. Today, a stream of digital bits can be engineered to represent a complex expression of text, calculations, sound, moving pictures, real-time simulations, a menu of interactive programs, and even connections to ``live" data off a network--all of it cross-indexed and able to respond instantly to the reader-viewer's desires. *Business Week*
The Historical Importance 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.

Later, the Industrial Revolution depended on new technologies to coordinate the flow of energy and raw materials into factories, to manage a radically segmented labor force, and to guide the large-scale distribution of finished goods. Industrialists also sought ways of stimulating demand for their mass-produced products. The result: the telegraph, telephone, punched-card tabulator, tabloid newspaper, advertising, financial accounting methods, market research, and broadcasting.
What is "Information technology"?
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