

**IS 103**

**HISTORY OF INFORMATION**  
**PROFESSORS DUGUID & NUNBERG**



# *i-* : A Prefix Whose Time has Come

What puts the *i-* in iSchool?

Why "the history of information"?

The screenshot shows the UC Berkeley School of Information website. At the top left is the 'i' logo and the text 'UC Berkeley School of Information'. To the right is a search bar. Below the header is a navigation menu with links: UC BERKELEY | ALUMNI NETWORK | SITE MAP | CONTACT US | SUPPORT THE ISCHOOL | ISCHOOL INTRANET. On the left is a green sidebar with a menu: ABOUT, PROGRAMS, PEOPLE, RESEARCH, ADMISSIONS, CAREERS, PARTNERS. Below the menu is the slogan 'FROM INFORMATION, KNOWLEDGE'. The main content area features a 'STUDENT PROFILE' section with a photo of Janaki Srinivasan and text describing her as an I School doctoral student with interests in information and computer technologies for development. Below this are two 'DON'T MISS' sections. The first, 'BREAKING NEWS', lists 'Tapan Parikh named Humanitarian of the Year' and 'Joe Hall weighs in on post-election'. The second, 'DON'T MISS', lists 'Lecture: Richard Stallman' and 'Lecture: Mitch Kapur'.



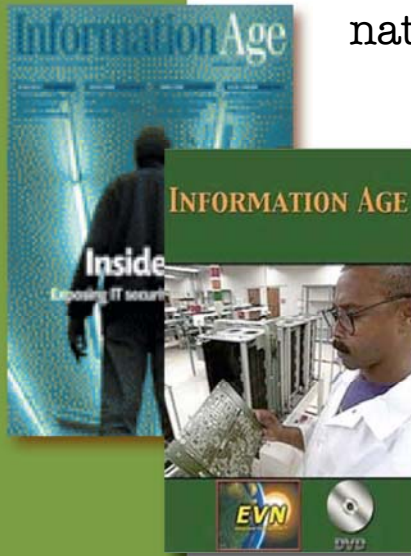
# "Information" – An Age for the Ages

"You, the American people, have made our passage into the global information age an era of great American renewal."

Bill Clinton, Farewell Address, Jan 19, 2001

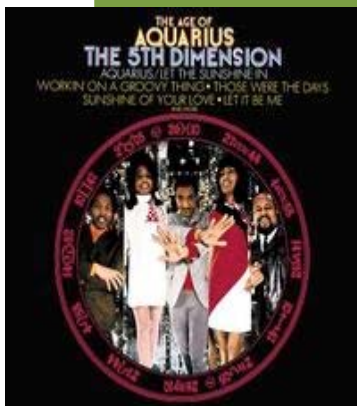
"The information age is opening up new possibilities for all of us, for our children and for the entire nation. . . ."

Bill Gates





# What Makes "Information" Different?

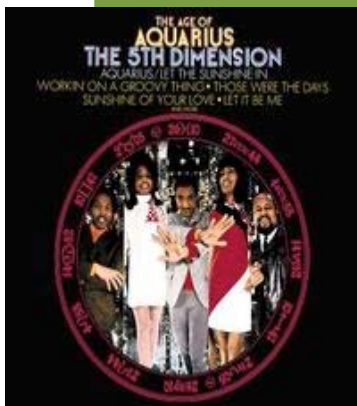


<u>Age of X/X</u> <u>age</u>	<u>Google hits</u> <u>(000)</u>
information	2274
digital	1880
internet	1137
computer	722
electronic	494
Cold War	1270*
nuclear	494
atomic	327
oil	188
television	96
automobile/-motive	69
terrorism	220
air	512
terrorism	220
democracy	220
Aquarius	268

\* Also 1200 for era



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- How is *information* different from *digital*, *internet*, *computer*, etc.?
- What is novel about the information age?
- What age does the "information age" succeed?





# Defining the "Information Age"

## **information age**

The period beginning around 1970 and noted for the abundant publication, consumption, and manipulation of information, especially by computers and computer networks.

*American Heritage Dict.*, 4th ed.



# "Information" as a lens for organizing the past

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## **History 3493 (Oklahoma U.) The Cultural History of Information.**

Prerequisite: junior standing or permission of instructor. An introduction to the history of information technologies and communications media from the printing press to the internet. Topics will include the print revolution, the advent of electronic communications, the growth of broadcast media, the development of the digital computer, and the internet boom.



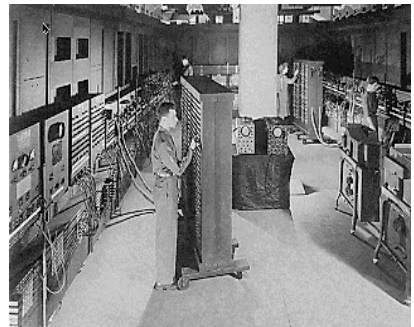
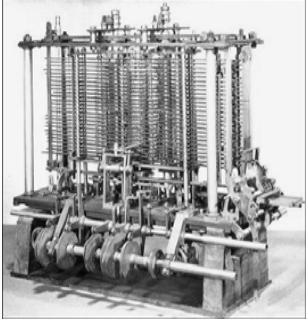
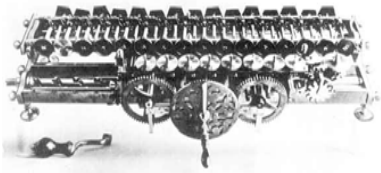
# Information and "Information Technologies"

What makes for "Information technology"?  
Prototypical instances of modern "IT"





# Tracing Technological "Antecedents"



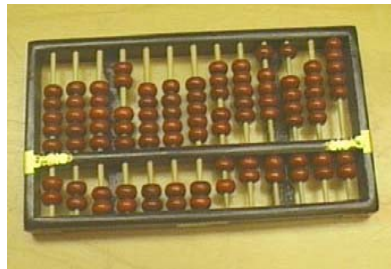


# Ask a silly question: "What was the first computer"?

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Pascal's calculator, 1624



Abacus 2400, B.C.



Stonehenge, 3100 B.C.



Antikythera mechanism, ca. 150 B.C.



Ishango bone, 20,000 B.C.



# The Whiggishness of Technologically-focussed Histories



All history = a triumphant (and, often, ineluctable) progress toward the present state...

... the history of our country during the last hundred and sixty years is eminently the history of physical, of moral, and of intellectual improvement.

Thos. Babington Macaulay, 1848

That great, growling engine of change -- technology.

Alvin Toffler, 1970.



# The Perils of "Chronological Snobbery"

"Chronological snobbery" [is] the uncritical acceptance of the intellectual climate common to our own age. .. Our own age is also "a period," and certainly has, like all periods, its own characteristic illusions. They are likeliest to lurk in those widespread assumptions which are so ingrained in the age that no one dares to attack or feels it necessary to defend them.

C. S. Lewis





# The World Turned Upside-Down

“Information Revolution”--  
880k Google hits

**Ask.com**  
THE OTHER SEARCH ENGINE

**> INFORMATION REVOLUTION**

**EVOLVE YOUR SEARCH!**

Welcome, person of courage.

Making it this far means you're willing to explore new things and take some chances. You don't follow the crowd. You're always searching for something better.

We could use your help.

Most people get online, use whatever search box

**SEARCH**

ask google msn yahoo

**THE MOVEMENT WHY ASK JOIN US**

**THE REVOLUTIONISTAS**







# "Everything is different"

## *Industrial Age Classrooms* *vs.* *Information Age Classrooms*

by Jane Bluestein, Ph.D.

On this page you will find a comparison between the Industrial Age and the Information Age, particularly as these differences correspond to classroom values, priorities, motivators, authority relationships, student behaviors and discipline goals.

<i><b>Industrial Age</b></i>	<i><b>Information Age</b></i>
<b>The Traditional Classroom</b>	<b>The 21st Century Classroom</b>
<i>Values, Priorities &amp; Motivators</i> <ul style="list-style-type: none"><li>• Uniformity, sameness; fitting in.</li><li>• Stability, permanence, security (rigid roles)</li><li>• Competitive</li><li>• Motivation for cooperation: pleasing authority (approval-seeking), avoiding punishment, humiliation, rejection, disapproval; oriented to adult and adult's reaction</li><li>• Outcome or product orientation</li><li>• Pleasing others regardless of personal needs</li><li>• Perfectionism</li><li>• Black-and-white thinking (or all-or-nothing thinking, dualism); tunnel vision</li></ul>	<i>Values, Priorities &amp; Motivators</i> <ul style="list-style-type: none"><li>• Diversity, personal potential and unfoldment; growth potential, personal fulfillment</li><li>• Flexibility, choices, personal control, (variable roles, expectations)</li><li>• Cooperation</li><li>• Motivation for cooperation: personal satisfaction; curiosity; positive consequences or outcomes that are unrelated to adult's reaction; oriented to student</li><li>• Process or person orientation</li><li>• Self-care; doing for others with regard for personal needs</li><li>• Mistakes seen as a necessary and valuable part of growth</li></ul>





# Approaching "information" historically

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"Information" = a conceptual template for classifying the various technologies, practices, and political, social, & legal institutions that contribute to the creation, collection, storage, transmission, diffusion, and reproduction of knowledge in a particular society...



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Points to bear in mind:

- Technology is often, but not invariably, a focus of these accounts...
- But technology is never a determinative agent by itself ..
- Issues of relation of technology to social background recur...
- Information-centered analysis doesn't presuppose the idea of historical progress...
- In this sense, all ages are "information ages"...



# Assignment for Second Meeting

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In a few sentences, describe a situation in the last 48 hours in which you have acquired, discovered, received, transmitted, or created some information, whether or not technology is involved. Bring your description to class on a piece of paper.



# Plan of the Course

[Course web page](#)