

# History of Communications Media

# History of Communications Media

- Outline of Course
  - Question – Why Study the History of Media?
  - Key Definitions
  - Some Notes About:
    - Information
    - Human Perception and Communication
    - Pre-literate Cultures
  - The Impacts of Literacy
  - The Impact of Printing

# History of Communications Media

- Outline of Course – 2
  - The 19<sup>th</sup> Century Media Revolution
    - Printing Innovations & their Consequences
    - Photography
    - Telegraph
    - Telephone
    - Motion Pictures
  - The 20<sup>th</sup> Century Media Revolution
    - Radio
    - Television
    - Xerox Machine
    - Computers & the Internet
    - Cellphones

# Why is the Study of Media Important?

- To a large extent, who we are now is the product of our memories of the past
  - Increasingly our memories of key events consist of media images and accounts
- Different media have different intrinsic defining characteristics in terms of:
  - What type(s) of information or message they can convey
  - How well they can convey it
  - The speed, completeness, and accuracy with which they can convey it
  - How recipients receive, assimilate, and react to the information

# Why is the Study of Media Important?

## - 2

- As communication theorists and historians point out, changes in the mode of communication cause changes in the culture
  - Media like other technologies have multiple impacts
    - Obsoletes other technologies or relegates them from a dominant technology to a niche
    - Often raises new issues and problems after large-scale adoption
    - Often upsets existing distributions of wealth, power, and status
      - » Empowers some (often new) groups and diminishes the power of others
    - Gives rise to new social institutions to deal with the new issues and problems

# Why is the Study of Media Important?

## 3

– Media also differ in such socially relevant impacts as:

- The number and types of people who can access the media as either message/information senders or message/information recipients. This reflects:
  - Cost of the media
  - Technological sophistication required
  - Ease of use
  - The ease or difficulty with which society or the government can control access and/or content

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- Information – What is it?
  - The term has several definitions because it is a term that embraces many different things
  - We will get into the various definitions during this course
  - We will start out by looking at two different perspectives of what it consists of

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- Information – What does it consist of? - 1
  - Fact – a unique bit of information that identifies an object, person, place, or date
  - Concept – a category of items or ideas that share common features
  - Procedure – a series of steps that show how to make or do something
  - Process – a description of how something works or operates
  - Principles – rules or criteria that predict an outcome



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- Information – what does it consist of? - 2
  - From an individual perspective, it consists of 5 rings of data, ideas, and knowledge

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- Information – what does it consist of? - 3
  - Internal information – the messages that run our body's internal systems and enable them to function

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- Information – what does it consist of? - 4
  - Conversational information – the messages we get from the formal presentations and informal conversations that we have with the people around us

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- Information – what does it consist of? – 5
  - Reference information – information and data about the physical world around us
    - Includes what we know from science and technology
    - Includes the content stored in our reference media

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- News information – information and data about recent events
  - It consists of information transmitted via the media about the people, places, and events that engage us, influence our view of the world, or even directly affect our lives

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- Cultural information – the knowledge and experience gained from our attempt to understand and come to terms with our civilization.
  - Information from the other rings is incorporated here to build the body of knowledge and culture that influences the society as a whole and our individual attitudes and beliefs.
  - It encompasses history, philosophy, and the arts

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- Content
  - This term also has several definitions:
  - The two most relevant are:
    - [n] something (a person or object or scene) selected by someone for representation
    - [n] what a communication that is about something is about

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- Data
  - [n] a collection of facts from which conclusions may be drawn; "statistical data"
- Knowledge
  - [n] the psychological result of perception and learning and reasoning
- News
  - [n] new information about specific and timely events; "they awaited news of the outcome"
  - [n] new information of any kind; "it was news to me"
  - [n] information reported in a newspaper or news magazine; "the news of my death was greatly exaggerated"



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- Motion Picture
  - [n] a form of entertainment that enacts a story by a sequence of images giving the illusion of continuous movement
- Broadcast
  - [n] message that is transmitted by radio or television
  - [n] a radio or television show; "did you see his program last night?"

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- Message
  - [n] a communication (usually brief) that is written or spoken or signaled
  - [n] what a communication that is about something is about

# History of Communications Media

- The Human Brain and Information
  - Information originates in the combination of sense perceptions and data stored in human memory.
    - Recall of related information in memory
    - Recognition and storage in short-term memory
    - Linking to other memories
  - By combining sense perceptions with knowledge in long-term memory, the brain creates new knowledge

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- The Human Brain and Information – 2
  - The brain seems to have different systems for integrating image input data and other sensory input data with information or knowledge structures in long-term memory
    - One consequence is that we have a memory for pictorial images that greatly exceed our memory for words or names.

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- Information can be broken down into 4 basic categories
  - Semantic
  - Visual
  - Conceptual
  - Procedural
- These categories have distinct implications for use, learning, teaching, and communication

# History of Communications Media

- Semantic information consists of symbols such as words, names, and numbers
  - Can represent things, persons, places, actions, or states of being
  - Semantic symbols have no direct link to the objects signified
  - They can be combined via language syntax to describe present, past, future, actual, conditional, or imaginary realities

# History of Communications Media

- Visual information consists of information in the form of visual or pictorial representations of real and/or imaginary person(s), place(s), or thing(s)

# History of Communications Media

- Notes about Concepts
  - Can be either abstract or perceptual
  - Have a prototype or best example
  - Have three levels
    - Superordinate
    - Basic
    - Subordinate
  - Expressed in the form of verbal information



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- The history of media can be broken down into five eras:
  1. Non-literate cultures –
    - Characterized human societies prior to writing and also the illiterate peasants and lower classes in many cultures
    - Oral & locality-based cultures
  2. Manuscript cultures
    - Characterized societies prior to printing in which literacy was restricted to a small elite
    - Primarily an oral & locality-based culture, but with filtering down of literate culture

# History of Communications Media

## 3. Printing cultures

- Characterized alphabet societies after the invention of printing
- Primarily a print culture, although many elements of an oral culture persist
- The book, pamphlet, professional journal, and later the newspaper and magazine provide people with some knowledge of the outside world

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## 4. Media-influenced cultures

- Characterized a 19<sup>th</sup> and early-20<sup>th</sup> century culture influenced by the telegraph, the telephone, and a railroad & post office system able to deliver mail and printed material (including newspapers) over vast areas at reasonable speed

## 5. Media-dominated cultures

- Characterized a 20<sup>th</sup> century culture in which radio, television, and later the computer/Internet become dominant influences

# History of Communications Media

- Non-literate societies
  - Information input is largely local via
    - Personal observation
    - What one hears from neighbors and elders
  - A good memory is highly valued
  - Most knowledge is some form of rhyme and poetry
  - Learning consists of rote memorization and learning by apprenticeship, sometimes with the aid of art
  - Knowledge
    - Its preservation consists of reciting in front of elders and fellow villagers
    - Often lost over time
    - Held in common

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- Writing – the first communications media
  - Writing first grew out of the need to inventory agricultural surpluses.
    - This required measurement and designation of ownership
  - Writing evolved as merchants and priests/scribes used different clay tokens to represent different quantities and commodities

# History of Communications Media

- Writing – the first communications media - 2
  - 3 Types of writing systems
    - Logographic – one symbol for each word or morpheme (e.g. Chinese, Mayan glyphs, & Egyptian hieroglyphics)
    - Syllabic – one symbol for each syllable (e.g. Japanese *kana*, Mesopotamian cuneiform , & Linear B of Mycenaean Greece)
    - Alphabet – one symbol for each sound or phoneme (e.g. Latin, Greek, Cyrillic, Hebrew, Arabic)

# History of Communications Media

- Notes about writing systems
  - No actual writing system employs one type of writing exclusively
    - English uses many logograms – numbers, \$, %, &, and @ are common English logograms
    - Egyptian hieroglyphics used pictograms, but Egyptian pictograms also stood for sounds as well as the things they were images of
      - Semitic-speaking persons picked up the system and stripped it down to pure symbols of sound in the form of the alphabet

# History of Communications Media

- Notes about writing systems -2
  - Writing systems arose in Mesopotamia before 3000 BC, in Egypt c3000 BC, in China by 1300 BC, and in Mexico before 600 BC
  - The first type of writing system was the logographic, then the syllabic, and finally the alphabet
  - Early writing was limited to the professional scribes in the employ of the king or the temple priests



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- Notes about Chinese writing
  - All Chinese dialects use the same script
  - Chinese script reflects
    - Pictorial representation
    - Use of diagrams
    - Use of one symbol to suggest another
    - Combination of signification and phonetics
  - There are over 50,000 symbols in a Chinese dictionary
    - About a 1,000 symbols count for about 90% of Chinese writing

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- The Alphabet
  - First alphabet originated c1800-1900 BC by Semitic peoples living in Egypt
  - Apparently originated as a kind of shorthand for taking dictation
  - Hebrew and other semetic languages did not and do not have letters for vowels
    - if we were to follow Hebrew usage in English we would write and print 'cnsnts' for 'consonants'.
  - The Greeks developed the first alphabet with vowels

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- What the alphabet did -1
  - Made possible the creation of lists
  - Converted traditional knowledge into an external object both available for inspection and no longer dependent on memory
  - Led to the concept of history
  - Led to the bifurcation of culture into a “high” culture based on literacy and a “low” culture of the illiterate

# History of Communications Media

- What the alphabet did - 2
  - Affected the way the Greeks saw the physical world
    - Led the Greeks to see the material world as analogous to the alphabetic process
  - Made eventually possible the modern expansion of literacy and democracy
  - Led to the development of law as a regulator of human behavior in place of oral custom and taboo

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- Ideographic vis-a-vis Alphabet Cultures – 1
  - The different historical paths that China and the West followed are to some extent a logical corollary of their different writing systems
    - In China, ideographic literacy and the related study of the Confucian classics
      - Created a common, largely-closed oligarchic elite
        - » That was spread all over China and
        - » Whose members had more in common with each other than they did with the non-literate speakers of the local Chinese dialect among whom they lived
      - Fostered a strong cultural conservatism

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- Ideographic vis-à-vis Alphabet Cultures – 2
  - In the West, alphabetic literacy had more diverse effects
    - In the manuscript cultures of the Roman Empire and Medieval Europe, there existed a literate Latin-speaking elite with an identity that was separate from the illiterate locals who spoke only local languages and did not speak Latin
      - » But this elite was more open and more diverse since it embraced government officials, military officers, clerics, and merchants
    - With printing, it gave each vernacular language a written form
      - » The consciousness of speaking and writing a distinct language helped foster an ethnocentrism and nationalism that led to fractured lands, fractious governments, and schismatic religions

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- Different Types of Writing Media - 1
  - Stone – Was permanent but not transportable
  - Clay Tablet – Had to be written upon before the tablet hardened. Long-lasting but fragile
  - Papyrus – Was light in weight; relatively cheap; easily transportable; suitable for both writing and drawing pictures; suitable for scrolls, but could be supplied only by Egypt
  - Parchment – Was relatively durable and long-lasting; suitable for codex books that contained both writing and drawing; expensive to manufacture, but could be produced anywhere since it was made from animal skins

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- Different Types of Writing Media – 2
  - Rag Paper – Was considerably cheaper than parchment, because it was relatively easy to produce; made a good writing and drawing media; turned out to be a superior media for printing; relatively long-lasting and easily portable
  - *Wood Pulp Paper – Was cheaper than rag paper, thus replacing rag paper in cheaper books and newsprint; not a very long lasting media due to its tendency to degrade as a result of acidification. 19<sup>th</sup> century invention*



# History of Communications Media

- Rag Paper - 1
  - Manufactured by taking linen and cotton rags, wetting them and letting them mold, pounding the rags until their threads become unwoven, soaking them in giant vats, straining the resulting pulp through a sieve-like mold, and then hanging the paper up to dry
  - Invented in China c105 AD; its manufacture spread into Islamic areas with the Islamic capture of Turkestan in 751 and reached Europe c1275.

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- Rag Paper – 2
  - Unlike parchment which could be produced over wide areas, paper manufacturing took place in cities with plentiful supplies of water and water power. In such cities, there were both cheap supplies of rags and markets for the paper
  - Paper had the following effects in Europe:
    - It helped move learning and education from rural monasteries to the new urban schools and universities
    - It encouraged merchants and traders to become literate in their native vernacular language in order to create and keep needed accounts and records.
    - Paper led to the creation of a body of manuscripts in the vernacular as well as in Latin

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- Manuscript cultures
  - A high literate culture and a low village culture
  - Texts tended to be read aloud even to those who could read
  - Letters and documents were quasi-public
  - Writing served as input into the oral world
  - Manuscripts had incipits and chapter/verse designations rather than titles or page numbers

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- Manuscript cultures – 2
  - Books are treasured items
  - The manuscript book had interesting corollaries
  - Word separation and punctuation of text did not become standard until the later Middle Ages
  - The sermon and public readings served as news dissemination media
  - What was ancient was venerated

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- The Impact of Printing