

## **Lecture 1: New Media Concepts and Historical Perspectives 1**

### **What is Communication?**

- “Overcoming of natural barriers to facilitate the movement of people, goods, and culture”

### **New Media**

- New media is often confused as “latest developments in media technologies”
- Select, store, process relevant data

### **Media Problematization:**

- Media are designed to solve problems

### **The Three C's of Convergent Media**

- Computing and information technology
- Communication networks
- Content

**Convergence:** Refers to the way in which media and media businesses have changed. Also refers to the overlapping products, services and activities in the digital media space (Rogers or Bell for example).

- Convergence in turn is creating a global “flat-earth”
  - Activities conducted throughout digital media can occur in any part of the world
- Second element of convergence is the morphing of devices
  - Computers become telephones via Skype
  - Mobile phones like iPhone are now major platforms for playing games

**Digital Media:** Can also be thought of as new media. Forms of media content that combines and integrates data, text, sound and images of all kinds; stored into digital formats; and is increasingly distributed throughout networks such as those based on;

- Broadband fibre optic cables
- Satellites
- Microwave transmission systems

**Such media has the following characteristics:**

- Manipulable
  - Easily changeable and adaptable, at all stages of creation, storage, delivery and use
- Networkable
  - Can be shared and exchanged in large numbers of users simultaneously and across enormous distances
- Dense
  - Very large amounts can be stored in small physical spaces (USB flash drives)
- Compressible
  - Amount of capacity it takes up on any network can be reduced dramatically through compression and decompressed when needed
- Impartial
  - Digital information carried across networks is indifferent to how it is represented, who owns or created it, or how it is used

**Any approach to thinking about new media takes into account 3 elements:**

1. The artifacts or devices that enable and extend our ability to communicate
2. The communication activities and practices we engage in to develop and use these devices
3. The social arrangements and organizations that form around these devices and practices

**Tim Burners-Lee:** Inventor of the world wide web and responsible for creating the **hyperlink**  
**Vannevar Bush:** Created the 'memex', also first to begin indexing information

**Packet Switching:** Data transmission where a message into broken number of parts sent independently, reassemble at the destination

## Lecture 2: New Media Concepts and Historical Perspectives 1

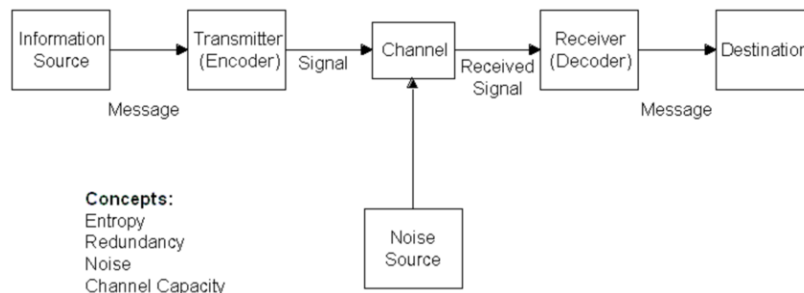
**Metcalf's Law:** The value of a network increases as it develops more connections

### Some key concepts and a little history

Article <http://www.ctheory.net/articles.aspx?id=45>

- Prior to written media and text humans were radically different species
- We are radically different at this moment since the advent of digital media than humans 100 years ago
- The way our brain functions and the way we access memory is differently
- For example: corrective lenses alter the way we view and collect data
- Technological look at communication and media

### The Shannon-Weaver mathematical model



These are the “5 black boxes”

**Example: telephone**

- The channel is a wire
  - The signal is an electrical current in it
  - The transmitter and receiver are the telephone handsets
- Noise would include crackling from the wire
  - In conversation, my mouth is the transmitter, the signal is the sound waves, and your ear is the receiver. Noise would include any distraction you might experience as I speak.

### Communication systems vs information systems

**Communication System (Kittler):** Traffic of goods & services/messages. Essentially, a way to communicate information.

**Information System:** Storage, processing, transmission of messages

**Digital Divide:** Economic and social inequality between those who HAVE access to internet vs. those who DO NOT. (Factors such as race, gender, income, location, etc)

**Globalization:** Interrelated processes such as rise of multinational corporations, international production, etc, process by which businesses or other **organizations develop international influence.**

## **Web 2.0:**

- Came about early 2000's
- Business revolution about moving to the internet as a new platform
- Focused on ability for people to share, collaborate information

## **Thought provoking questions:**

**Is human thought an information system? Embedded in a communication system?**

**An information system will always be embedded in a communication system**

**“There are of course media technologies without love, but there is no love without media technologies.” Kittler, 1999**

**As more information is added to the system there is more room for noise (more things could go wrong)**

**Time or space bias**

**Knowledge can only be as complex as an individual can process it on their own**

**In an oral culture, everything known is:**

- Collected by human perception
- Stored in the brain, often with the aid of mnemonic devices like stories, songs, poems, myths, etc.
- Processed in individual thoughts and collective conversation

**Writing is the first break from Orality**

**Script has two important variables:**

1. The development of writing in relation to speech and its ability to represent something else-pictograph and alphabet
  2. “Physical variables relating to writing implements and writing surface decide as to the space and time frame of communication.” The media dictate time and space. Speed, distance, and longevity. (How fast can messages be created? How long do they last? How fast can they be moved? How far can they be moved? How big can they be?)
- First manifestations of script are addresses

- They tell us what something is or what is held within
- OR who something is owned by-thus marking its proper place within an ordered structure.

## Lecture 2: New Media Concepts and Historical Perspectives 2

### New Media (Ch. 2 The History of New Media)

[https://watermark.silverchair.com/9780822388906-005.pdf?token=AQECAHi208BE49Ooan9kkhW\\_Ercy7Dm3ZL\\_9Cf3qfKAc485ysgAAAEAwggHcBkgqhkG9w0BBwagggHNMIIByQIBADCCAcIGCSqGSIB3DQEHATAeBgIghkgBZQMEAS4wEQQMIOzXVigMoOZnNVgwAgEQgIIBkx5V-Y8ePM-I\\_fslaeUZm9mioq50F3iglzTU1QEF2zeYyCn3ON2SX3P5oYsiHhejZOKLKOMgc7N6TK9x\\_fOFZ62gmkU0DF490aEwsJSUwU4Q0EYhTbpauQlzE3PQq-LeKeVd7488xLaW4O-xPvh2zmcEL4DxUdrkYiiCk7nXnWLYCy896u7JGMDzEdvF0aiNgBSMjAvxzEMhkyzqhywFz8M\\_bf-EZzPQwJ0dvkX0-z0HfvKnvT2rkBESxYoOdpZtkl6SS6HiUvgPTxfJJH7IL6FWdk2wQYJnI6zzh2yer7rRQcuzkxOuOpg2eoh20gAdiRLNek3PmeVDhh9AEnMfrpzhwk6xopz1HpDNu0nJgmFORQNqLz14jazwoV6\\_dwwiPihzBro9jjaqGmljEV9aowC5Q876vTCXQpNvAUzAFV2m5HQv6aUvo59eZAosqk3pM-695JCKL\\_QuoT9RAHrNNSCfVxlXXY1e66rghNc-zH5Tg2qLf5XmXZgOJvRf0sYEGYYwYEGzhwgN3SPC9TVzh2nwr4](https://watermark.silverchair.com/9780822388906-005.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAEAwggHcBkgqhkG9w0BBwagggHNMIIByQIBADCCAcIGCSqGSIB3DQEHATAeBgIghkgBZQMEAS4wEQQMIOzXVigMoOZnNVgwAgEQgIIBkx5V-Y8ePM-I_fslaeUZm9mioq50F3iglzTU1QEF2zeYyCn3ON2SX3P5oYsiHhejZOKLKOMgc7N6TK9x_fOFZ62gmkU0DF490aEwsJSUwU4Q0EYhTbpauQlzE3PQq-LeKeVd7488xLaW4O-xPvh2zmcEL4DxUdrkYiiCk7nXnWLYCy896u7JGMDzEdvF0aiNgBSMjAvxzEMhkyzqhywFz8M_bf-EZzPQwJ0dvkX0-z0HfvKnvT2rkBESxYoOdpZtkl6SS6HiUvgPTxfJJH7IL6FWdk2wQYJnI6zzh2yer7rRQcuzkxOuOpg2eoh20gAdiRLNek3PmeVDhh9AEnMfrpzhwk6xopz1HpDNu0nJgmFORQNqLz14jazwoV6_dwwiPihzBro9jjaqGmljEV9aowC5Q876vTCXQpNvAUzAFV2m5HQv6aUvo59eZAosqk3pM-695JCKL_QuoT9RAHrNNSCfVxlXXY1e66rghNc-zH5Tg2qLf5XmXZgOJvRf0sYEGYYwYEGzhwgN3SPC9TVzh2nwr4)

### Early Traces of New Media

- Advances in new media have their roots in technologies that predate the Internet by at least 50 if not 100 years
  - New media is profoundly different from old

### Institutionalized, Instantaneous, Worldwide Communication: The Telegraph

- One challenge of human communications has always been sending messages further than you can see
  - Various attempts were made such as; towers, balloons and smoke signals
- Most people settled for writing and sending letters by post
  - Post office in Britain introduced innovative “penny post” which is now known as text messaging
- Physical letters can only go so fast and time for delivery increases with distance
- In the 1800s, the telegraph was invented and messages were sent through morse code (Samuel Morse)

## **From Telegraph to Telephone: A Revolution in Sound**

- The telegraph was a machine that let people communicate from one place on earth to another all through the use of morse code.
  - It was developed in the 1800s
  - It was very useful in industries such as business, railways, shipping, etc. As it allowed them to communicate on things such as speeds, news, and coordinating purposes
- Morse code had to be learned by basically all individuals because it was the only way of communication in that era. It seems normal but something more convenient was in the works.
- Several inventors set out to find a way to allow voice communication through a wire, and Canada's Graham Bell's telephone was the winner
  - It eliminated the use for typing out every individual letter and allowed for instant communication
- It became so popular that when it was released they had to urge people to only reserve phones for emergency or important use.
- With the release of the mobile phone came not only an adoption curve but a learning curve
  - They had to find a way to acquire the product, but they also had to learn how to use it in a proper manner (Ex: putting the phone on silent, or not talking loud in restaurants)
- Network neutrality was introduced in a sense that there was a common fee for using this device and the provider of the device could not discriminate based on what was being said over the phone
- Emergency services also use this device as a lifeline in their work, as if this were never invented firefighters would not know where the fires are, and ambulances would not know where the injured civilian is

## **By the Flickering Light, We Will Conjure Movement: Film**

- The telegraph was able to transmit a still photo from one place to another, but the next invention was the use of video and color
- Invented by many people including Thomas Edison and the Lumière brothers of France
- The invention was the use of multiple pictures going one by one very fast, called FPS (frames per second)
  - The more FPS the smoother the video will be
- Today the frames are not whole images, they are made up of tiny pixels that change according to the image

## **Speaking Without Wires: Radio**

- Radio technology was thought to be so fascinating because there was one voice or sound being heard in multiple places all at once
- Radio technology brought several developments that were key to internet and new media
  - The importance of hobbyists
  - Identification of new business models including advertising and sponsorship
  - Regulation of new content
- The radio proved to be very useful in terms of the communication between ships at sea because it was more convenient than the other option which was morse code at the time.
- Prior to the 1920s the radio was not a broadcasting undertaking
- Eventually there were certain radio channels dedicated to certain topics, so hobbyists could meet people of similar interests
  - This could be known as one of the earliest forms of social media
- Before the 1920s the radio was very unregulated by the government, meaning that they had very little interaction with the device.
  - After broadcasting became popular the government started to regulate the channels and then came the creation of things such as CRBC (Canadian Radio Broadcasting Commission which was a national broadcaster, and CBC (Canadian broadcasting corporation)
- Eventually came the era of commercial broadcasting, where instead of making money selling radios, the channels on the radio could broadcast things such as ads and sponsorships to earn money, Brands such as NBC, CBS, and ABC hopped onto this bandwagon first and are one of the biggest broadcasting companies in the world.

## **Pictures and Sound, Educational Potential: Television**

- The telegraph had abilities to send one frame pictures over a long distance, but the next invention was using film as a tool to teach individuals about a certain topic
  - The war in the 1940s put a hold on this project as all of the resources were being put to better use
  - In the 1952 after the war had ended, Montreal's CBFT station was one of the first to use commercial broadcasting
    - Not too long after that, CBC came into play with them airing the coronation of Queen Elizabeth II and making it available to Canadians on the same day.

- Some of CBC's first broadcasts had to do with politics as that was a very important time in history as the second world war had recently concluded
- With the rise of television, there were concerns that film and radio would be abolished and be known as "old media"
  - Two forms of media have been evolved with things such as 3D technology, special effects, and sounds in film, and other things such as news and weather reports on the radio.
  - "Old technology" is not often totally wiped out as there are many opportunities to make the experience better and help it fit into the modern era better
- Noam Chomsky spelled out 5 filters that he thinks distorts messages coming from commercial media, and are epitomized by television:
  1. Size, ownership, profit orientation
  2. The advertising license to do business (there has to be lots of advertising in television, which affects the viability of the business)
  3. Sourcing media news (governments and corporations provide prepared versions of the news)
  4. Flak - Media outlets are not allowed to break from their normal rank to report critical news, it is all very controlled by an external source
  5. Anti Communism - This is suggesting that western media has a major bias on the "War on Terror" and media outlets have to report only one side of this situation because they do not want to be seen as "one with the enemy"

## **Artificial Intelligence**

AI is the newest form of "New Media" with the comings of technologies such as Siri, Amazon's Alexa, and many more. AI was only a theoretical possibility as said by Alan Turing in the 1950s as the first computers were being built. AI has come a long way since the first computer was built but there are still reoccurring issues that scientists from companies such as Google, Apple, Facebook, Microsoft and IBM are still working on fixing to this day.

## **Communications Convoy**

### **Introduction**

- CB (Citizens Band Radio)
  - Could be used for great good and great harm?
- A CB is a two-way radio system open to personal use that could be installed in the home as well as in semi-trailers, cars, boats, motorcycles, etc.



- Vh1 claimed the Internet was simply the CB of the 1990s
- Communication has allowed for governing at a greater distance
- CB is integrated heavily into power relations

### **Citizens Banding Together over Radio**

- Popularity of CB rose in the 1970s due to truckers trying to be faster, the tech becoming cheaper due to advancement in technology, and the physical size decrease due to transistor technology as opposed to tube technology
- Despite this, there isn't a lot of history time dedicated to CB
- This is due to a bias in communications studies because CB cannot be quantified or transferred to text
- Channels were introduced that were separated by topic

### **Surveillance: Seeing Is Believing, but Hearing Is Helpful**

- Truckers use CB to maintain a profitable speed on the road and not get caught for it by the police
- Soon, the police were able to listen in on the transmissions which lead to the development of trucker slang and code language to bypass this

### **Smokey's Got Ears and the Citizen Surveyors**

#### **The Wildcat Truckers**

#### **Concluding Remarks**

- A renewed importance placed upon the function of transportation as a cultural and communicative practice that defines relationships between the two as complicit
  - The two need to be thought of in the same terms, especially with the increasingly mobile capabilities of nearly all communications technologies
- Transportation and the forms of mobility produced by its various modes need to be analyzed as key sites of culture and communication
- The cB radio provides a unique site in that it was an early mobile communications technology

#### **Jeremy Packer book**

- This is why truckers were considered cool in the 70s and 80s, because they were almost road rebels fighting against the system and a free road not heavily policed

- Trucking went from being viewed as a loner activity that was concerned with safety to more of a social hub, a convoy, of people trying to maintain a profitable speed with the help of others mostly due to the changing country music which was heavily influenced by the whole trucker culture
- Law initiative was taken against this, by increased surveillance of CB and truckers started to strike by commissioning traffic jams

## CCIT Lecture 3 Notes 20/09/2018

### From telegraphs to internet

- 1) Optical telegraph across Napoleon's french conquest
- 2) Electrical Telegraph (1836)
  - a) Decisively separates communication from transportation
  - b) August 16, 1858, reduces the communication between North America and Europe from ten days- the time it took to deliver a message by ship- to "instantaneous"
- 3) Phonograph Gramophone (1877)
  - a) Captures, stores, and reproduces sound
  - b) Captures actual sound waves, not human's interpretation of noise.
- 4) Photograph (1839) and Film (1895)
  - a) Captures, stores, and reproduces LIGHT or images
  - b) Chemical process responds to light waves and humans aren't necessary for representing the visual world
  - c) When mechanized, captured light becomes movement.

**Arpanet:** First fibre optic system developed in the 1960's (Post Cold War development)

### Some questions to ask

How fast can messages be created?

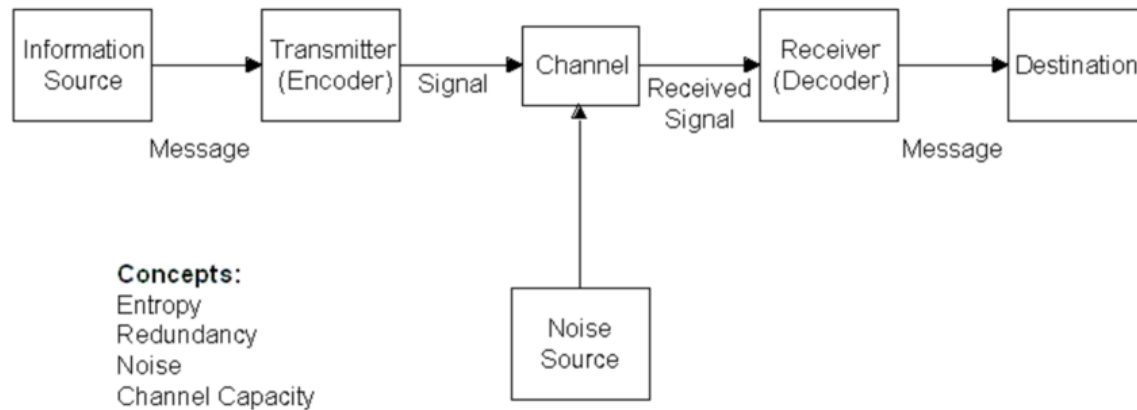
How long do they last?

How fast can they be moved?

How far can they be moved?

How big can they be?

How accurate are they?



### Technical media

- “**unlike writing, technical media** do not utilise the code of a workaday language (human based learning systems). They make use of physical processes which are
  - 1) Faster than human perception
  - 2) Are only at all susceptible of formulation in the code of modern mathematics (kittler)
  - 3) Eventually they do not need humans to perceive, interpret, translate, and inscribe data.”

### How war gave us the Computer

Ballistics- automatic aiming of anti aircraft guns

Codes- automatic breaking of germany’s secret coded messages

-Humans deemed too slow and undependable to deal with the realities of mechanized warfare

-Humans are seen as unreliable communicators

-Humans are understood to be the noisiest element in the communications system.

### Chapter 3 Notes

#### Hype or the Counter-Hype?

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### CCIT Lecture 4 Notes 27/09/2018: CB Radio: Breaking monopoly on Mobile Media

-Police agencies and the military have had a monopoly on the “justified use of force” AND a monopoly on the use of strategic mobile communication technologies

-Yet, there has been considerable resistance to the state's monopoly of tactical systems used to collect, store, and transmit data necessary for maintaining order.

-The 1970s you get mobile citizenry (CB Radio)

-Wildcat truckers rebellion

Police use media to track mobility. Including who has access to it.

### **Print media**

- Drivers license- filled with data
  - assigned a unique number (provide an address to the file)
  - Address of driver
  - Age/birthdate
  - Gender
  - Height
  - Signature
- License plate
- VIN #

### **Electronic Media**

- Radios
  
- Cameras
- Video cameras
- Breathalyzer
  - Drunkometer 1938 (Breathalyzer)
- Radar "gun"

**Citizen Band Radio:** system that enables short distanced radio communication between individuals

- First two way radio created by Motorola (1930)
  - First radio in police car
  - Could only reach about 5 miles
- "There was a need and I could see it, it was a market that nobody owned"
- Ceo of Motorola, Galvin, 1930

**Growth of CB Radio:** Fastest growing communication technology since television during the 1970s

- 30-50 million users in north america by 1979 from just over a million in 1970 (14 million licenses in the U.S.)
- 25% of cars
- 80% of large trucks--semis

### **CB Radio also emerged CULTURE:**

- Hit movies and TV shows. Smokey and the bandit and dukes of hazzard
- New accounts
- Millions of CB users guides as well as magazines
- Hit songs

### **How does CB change the equation when it comes to surveillance?**

- In a time before cellphones, how could you coordinate actions between people?
- In a time before cell phones, how did you share information during a political protest?
- In a time before cell phones, how could you monitor police whereabouts or spread information about police tactics?
- In a time before cell phones and social media, how could you quickly mobilize a large number of people?

### **Slack and Wise offer a critique of two prominent explanations for how and why we have the technologies that we have**

1. Progress - “move forward”
2. Convenience - “appropriate to a given situation”

The belief in progress is widely held and it is very often assumed that progress derives from technology

### **The Progress You Believe In**

#### **Material Betterment Because of Technology**

- Life is more comfortable
- We are healthier
- We have more things

#### **Moral Betterment Because of Technology**

- We are more enlightened
- We treat each other better
- We have greater tolerance

### **Critiques of the Progress Narrative**

1. Problem of measuring progress - based on numbers and hence things that can be counted

- A focus simply on **more**
- A focus on **efficiency**

## **2. Progress and evolution conflated - as if technological change follows the model of biological change**

- Assumes that all technological change is “for the better”
- Misunderstanding of evolution assumes that “natural selection” chooses the best, not merely that which fits an environment

## **3. Notion of progress is used to judge and control others**

- Grounded in a belief that technological sophistication = moral, ethical, spiritual, advancement
- Based on linear view of history that moves from primitive to “advanced”
- These beliefs are used to force “development” on others to further inequitable forms of social, political, and economic control

## **4. Progress for whom and for what**

What passes for convenience often leads to new obligations and expectations

- The idea was that machines work longer so the humans don't have to
- People work longer today than they would a generation ago

## **Needs VS Wants**

- We have moved from tech being used for bodily needs to becoming a cultural, economic, and political necessity
- To sustain bodies and our way of life in the contemporary world, we must all use tech
- Hence, technology is now needed to survive

## **Overcoming Limits of the Body - Exceeding the limit horizon**

- Time
  - Do more in a shorter amount of time
  - Maximize time alive and time awake
- Space
  - Get us further faster
  - Be in more than one place at a time
  - Experiences other places from everywhere

## **Slack and Wise**

- Progress implies an end goal to progress towards
- The goal for humanity is the creation of a utopia
- A measure of more or fewer of something sometimes indicates progress (more computers, fewer deaths)
- America was dreamt to be the perfect balance between industrialization and nature
- Electricity was viewed as almost supernatural upon discovery
- Important to think about who benefits from the “progress” to determine whether it is positive or not
- In ancient Greece, body standards were based on what the body needs while now it is more about what the body can’t do
- Limits are a horizon and humans focus on pushing that horizon further and further
- Main limits we are concerned with are that of time and space
- Communications technologies satisfy both
- Many convenience technologies make more inconveniences

**Technological Determinism:** although its NOT a theory of technological change, its a pervasive way- especially in media- of thinking of the relationship between new technologies and society. Technological determinism sees social change as driven by technological change.

## **IMPORTANT TERMS OF CHAPTER 4 (FOR LECTURE 4)**

**Electromagnetic Spectrum:** full range of radiant energy in form of radiation

- Higher Frequency+Shorter wavelength= more energy
- **Radio waves** at LOWER end of spectrum

**Cellular:** method of mobile radio communication that distributes transmitting/receiving of messages into smaller hexagonal cells, with participating devices engaging with antennas and towers

**Multiplexing:** process of encoding multiple streams of info into single stream to make maximum use of a scarce resource such as a telegraph, telephone line, fibre optics

## **IMPORTANT TERMS FROM READING 5:**

**Actor Network Theory:** A variation of the social network analysis which places ideas and technology as “actants” within a network for a more holistic analysis. “Everything acts together, we are actants working with one another”

**Soft Infrastructure:** System of associate instructors and social network connections in human interaction that underpins and encourages flow of ideas between people and institutions

**Modularity:** properties of a project which determine extent it can be broken down into smaller components that can be independently produced before they're assembled into a whole.

-Ex: People putting small information on Wikipedia before it becomes a whole

**Granularity:** Size of modules in terms of time and effort person must invest to produce

**Convergence Culture:** Media forms and consumption that cross different sites and formats, incorporating a professional and amateur aspects

### **IMPORTANT TERMS READING/LECTURE 6:**

#### **Post-Fordist Business Model:**

- Differs from classic assembly line factory pioneered by Henry Ford
- Characterized by multiple small players and independent ownership of components and suppliers

#### **The gaming industry is characterized by a complex and recursive game development**

- Some companies build tools
- Some do special effects
- Others do motion, picture, physics, algorithms

### **LECTURE 6: VIDEO GAMES, MEDIA THEORY AND MORAL PANIC**

#### **'Media effects' theory**

- Result in Moral Panic
- Developed during early 20th century
- Concerned with effect of mass media and broadcasting on audiences and population
- Theories founded on fear of influence of propaganda

**Disinhibition theory:** exposure to violent media may legitimize the use of violence

**Imitation theory:** individuals may learn violence from media figures and characters

**Desensitization theory:** habituation and exposure to violent media content has real life effects.



- The media effects model tackles social problems backwards, By starting with the media and then trying to create connections from there on to social beings
- The effects model treats children as inadequate
- The effects model is often based on artificial studies
- The effects model is often based on studies with misapplied methodology
- Unable to show that one thing causes another are treated as if they have done so
- The effects model is selective in its criticisms of media depictions of violence
- The effects model makes no attempt to understand the meanings of the media

### **Folk Devils and Moral Panics**

1. Someone, something or a group are defined as a threat to social norms or community interests
2. The threat is then depicted in a simple and recognizable symbol/form by the media
3. The portrayal of this symbol rouses public concern
4. There is a response from authorities and policy makers
5. The moral panic over the issue results in social changes within the community

How to identify a moral panic from a true problem

- Extreme claims before data
- Public calls for research supporting the moral panic
- The goldilocks effect
- Save the children! Mentality

## **LECTURE 7: OLD AND NEW FLOW**

Change from specific times and places for media consumption to anywhere/anytime screens

### **What is flow?**

**Flow 1.0:** sequenced programming of shows and advertisements designed to keep the viewer “glued to the screen”

### **Mobile privatization**

Shift from public spaces and public media to private spaces and private media.

‘At once mobile and home-centered way of living.’ (R. Williams, 1974)

### **How are people expected to watch TV during the age of broadcast (1950-1980?)**

- Fixed in place
- Limited options aimed at LCD
- Schedule that divides the day into viewing times and audiences
- Integrate TV into the flow of an idealized day of work and leisure
- Weekday and weekend are different kinds of TV times

- Organized by rating systems

**“Flow was means for situating subjects in the spatiotemporal program of capitalist production and reproduction,” (Oswald and Packer, 279)**

**Some technologies that alter time and space:**

- The remote
- The VCR
- The video store
- Cable

And then time and space compresses even more

- DVD
- Netflix--delivery
- TiVo
- Youtube
- Netflix--"watch now"
- Amazon video
- Etc...

**Flow 2.0**

“Networked smart screens are the mechanism by which time and space will be overcome and reanimated. The screen becomes the guide for moving from place to place and the mechanism by which spaces and institutions are interconnected. In this sense they are infrastructural, they forge and maintain linkages.” (Oswald & Packer, 286).

**LECTURE 8: FAKE NEWS, ALTERNATIVE FACTS, MISINFORMATION**

**Fake news:**

- The motivations of those who create this content
- The way this content is being disseminated
- The different types of content that are being created and shared

**7 Types of Misinformation:**

1. False connections
2. False Content
3. Manipulated Content
4. Satire
5. Misleading Content
6. Imposter Content
7. Fabricated Content

## Typology of fake news

1. Satire
2. Parody
3. Fabrication
  - a. Is an item that draws on pre-existing memes or partialities
4. Manipulation
5. Propaganda
6. Advertising

## Advertising Vs Propaganda

**Advertising:** Capitalistic, used to promote consumer goods, events, services,

**Propaganda:** Bias political Motivations

Multiplexing: (many units)

## LECTURE 9: SURVEILLANCE

1. Powerful Tool for Social Control
2. Increasingly digital, often the result of self disclosure
3. Creates new forms of value
4. Much of our leisure spent online should be considered WORK, makes data a commodity and valuable
5. Every day internet users are not compensated for this work

### Police Power:

- Negative Consequences of rule infractions
- Jail time, fines, execution

### Panopticism and Disciplinary Mechanism Power as PRODUCTIVE

-Every action is under scrutiny

-Timely examinations

-Perfect record keeping of all actions, thoughts, deeds,

-Strict scientifically determined regimen for BEST results

-People will 'Internalize the gaze' and monitor THEIR OWN activity once surveillance seems omnipresent

### Taylorism:

- time & motion studies used to 'empower' workers to be more productive
- Efficiency engineers watched who worked best and stole their skills and knowledge
- Create charts for everyone to follow

**Digital Enclosure (Andrejvic):** creation of interactive realm wherein every action and transaction generates information about itself

## **LECTURE 10: INTERNET GOVERNANCE, ACCESS, AND RIGHTS**

### **Should access to the internet be a human right?**

- Opponents argue that although technology can enable the actualization of intrinsic “human rights”, they should not be ascribed rights status themselves

**“Horses were once a necessity to make a living. Owning a horse, however was not considered a right.”** (Cerf, some guy from google)

Two things to consider from this saying:

- That human activity is socio-technical in nature (meaning mostly based on tech)
- When does a technical “thing” become an essential component of human activity?

Cerf is correct, of course that technology itself is a catalyst for a broad range of intrinsic human rights.

The problem is that it is often exceedingly difficult to mobilize those intrinsic human rights in the absence of the technology

### **Technological Determinism Perspective:**

**Universal Access** would require:

- Enforceable public policy and a set of rules
- Way To compel

**As of July 2016, access to the internet is considered a human right, United Nations Article 19.**

The UN resolution reflects the “umbrella handle” argument in support of internet access as a human right

In other words- the argument that the actualization of a broad range of human rights is functionally dependant on access to the internet.

By making explicit reference to a number of concrete activities that are supported by internet access (education, healthcare, political activities etc...), the 2016 resolution broadens the umbrella of the internet rights narrative beyond the relatively narrow scope of communication action (free expression, freedom of conscious)

As great as the resolution was, the problem is that the UN is limited in its ability to prescribe anything beyond a relatively abstract set of “guiding principles”

## Who regulates the internet?

Global level: a mix of social and corporate interests mostly concerned with standardization:

**ICANN:** Responsible for administration of domain names

**ITU:** Responsible for creating infrastructure of the internet

**WSIS:** UN body whose goal was to bridge social and corporate interests against the backdrop of globalization

**National Level:** the CRTC (in Canada) and FCC (in the USA)

When it comes to governing the internet, one of the major problems is that the rule books for the both sides of the internet are remnants of a very different era.

Intellectual property and copyright  
Common carriage, neutrality, regulation  
Privacy

**Defacto Compulsory:** when an otherwise voluntary activity becomes so normalized that choosing not to participate becomes increasingly difficult

## Lecture 11: Innovation, Planned obsolescence, and other media waste.

Light bulb and Media

- Redistributes time and space. Overcomes the natural barrier of night or the depths of darkness
- Used to signify at greater distances
- Allows for greater collection, storage, and processing of data.

### How did the invention of the light bulb alter time and space?

- Night time became work time, social time, "awake time"

**Phoebus Cartel (1924):** Formed in secret by the major light bulb manufacturers- including those from france, germany, japan, hungary, the netherlands, britain, and the U.S.

- Agree to carve up the global market for light bulbs
- Cult the length of time a light bulb lasts to 1000 hours

**Planned Obsolescence:** planning or designing a product with an artificially limited useful life, so it will become obsolete (that is, unfashionable or no longer functional) after a certain period of time. (Example. Designing a lightbulb that can only last certain amount of hours.)

Changing screens: movie, tv, computer, phone, tablet

- They are all toxic and all innovative
- They may also be in competition or in collusion with one another
- Pace of change has tended to speed up.

CCT109 Lecture 12

## **Media theory, google, and the future of perception augmentation**

German media theorist, Friedrich Kittler once defined media or “discourse networks” as “technologies and institutions that allow a given culture to select, store, and process relevant data.”

4

Select (the ability to capture or collect data and determine which data is worth focusing upon)

Store (think of memory)

Media as the extension or replacement of fallible human faculties

- As Kittler put it “handicaps isolate and thematize sensory data streams.”

Phonograph Edison 1888

“Deafness, pure and simple,’ he (edison) writes, ‘was responsible for the experimentation which perfected the machine (4, p54). g

- “Don’t Be Evil.” Google’s first motto
- Astro Teller: director of Google’s most out there innovations (Google X)
  - Treat problems as an engineering problem
- Media as a tool for human shortcomings
  - Limitations in memory, perception, and processing of data
- Edison created the phonograph because he was going deaf
  - Shifted from hearing to hearing
- Same thing with Alexander Graham Bell who created the telephone as a way of dealing with hearing loss
- Google Car first tester was blind
- **Google Glass**
  - Get those with autism to learn to be self sufficient or sufficient via technology
  - Works on behaviour control through social literacy
  - Brain power uses google glass to monitor autistic subjects through small movement assessment that correlates to any number or states of emotion as well as perceptual focus
    - Camera
    - Microphone
- **How does brain power control behavior**
  - Sees a ‘gamified’ face
- **Trace: uses Google Glass to store memories for alzheimer’s victims**

- Think “The Entire History of You” from Black Mirror
- **DARPA : military department dedicated to weird innovative technologies**
  - Created Arpanet

### (Textbook) Chapter 9:

#### Internet Law

- Defamation and Libel
- Internet law does not really exist
- **Governance:** links between private and public sector or market and state, government can promote these sectors and/or constrain them
- **Cyber-libertarianism:** internet is manageable through self-governance
- **ICANN** – private, not for profit agency, involves name registration and online domain names
- Pare and Froomkin find that US government has influenced the conduct of ICANN
- **ITU (International Telecommunications Union)** – dates from the era of the telegraph, first set up to mediate disputes around the world (helped avoid problems like the establishment of the railways)
- They control technical infrastructure, NOT CONTENT
- Canada refused to sign their agreement 2012^

#### Canadian New Media Policy

- IHAC – Information highway advisory Council
- Archival Policy
- **Forbearance:** Declining to regulate (E.g. how phones are priced, what services they provide (except for providing emergency access) are not regulated)
- **Traffic shaping:** managing different protocols on the internet differently (the web or email are examples of protocols)
- **Digital Locks:** aka copy protection – are technical ways of preventing people from copying material or otherwise infringing on the rights of copyright holders (even when a fair dealing/fair use right may exist)

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**Can someone add an answer key for the practice exam at the end of this docs? That would be nice :)**

December 2017 Exam

MC:

1.D

2. C?
3. B?
4. B?
- 5.
6. A?
- 7.
8. D?
9. D?
10. A?
- 11.
12. C?
13. E?
14. D?
15. B
16. C?
17. B?
18. C?
19. B?
20. C?
- T/F
21. T?
22. F?
23. T?
24. F?
25. T?
26. F?
27. T?
28. T?
29. F?
30. T?
31. F?
32. F?
33. T?
34. T?
35. T?