

## **CS325C Digital Media & Culture**

### **Group 8:**

#### **Week 8: Open Source Software (group presentation)**

- **History when were they introduced?**
- **Timeline when certain ones were introduced**
- **Benefits? Negative aspects?**
- **What does the future look like for open source software?**
- <https://www.bing.com/images/search?q=open+source+software+examples&FORM=HDRSC2>

#### **Week 5: Software Operations (online discussion)**

- “Group 8: Descriptive Title”

20+ posts for weekly discussions (3/ week)

### **Lecture 1: January 7<sup>th</sup>**

#### **What is digital media?**

- Videos, images, electronic billboards ,etc
- Television, but hasn't always been digital
- Social media, it is digital as photos and content is generated online and a platform that uses a certain web model
- Computer programs and software; digital imagery, digital video; video games; web pages and websites, including social media; data and databases; digital audio, such as mp3s; and e-books are examples of digital media

#### **What is digital culture?**

- Symbols and texts we share and communicate via
- Norms and values that bring people together
- Digital Culture stands for the contemporary phase of communication technologies, one that follows 19th century print culture and 20th century electronic broadcast culture, and that is deeply amplified and accelerated by the popularity of networked computers, personalised technologies and digital images

## **Media**

- Technologies of mass connectivity
- Disseminators of cultural discourses
- Messages conveyed by those technologies
- Communicative institutions

## **Transmission Model of Media**

- Sender --> message → receiver
- Media technology as channel of communication

## **Media as Communicative Institutions**

- Frameworks of knowledge
- Relations of production
- Technical infrastructure
- encoding/ decoding: media message as meaningful discourse
- Society/ Culture: as a complex of individuals and their membership groups
- How digital medias shape our own practices?

## **Culture**

- The common everyday practices of a group of people
- The ideas, values, and objects created by and representative of people
- The sum total of ways of living built up, over time, by groups of human beings and transmitted from one generation to another

## **Social Media's Uses**

- Cats are cute?
- Arab spring and social movements, used social media/ digital media platforms to organize protests in the streets
- Fake news
- Uses of the same technology, for very different reasons

## **Ericsson: The Network Society:**

<https://www.ericsson.com/en/news/2014/9/welcome-to-the-networked-society>

- Connecting people together all over the world
- Advanced energy saving technology
- Weather alerts/ life savers
- With everything connected our world changes
- The networked society

- Even poorer countries can connect, with new innovations of connecting the first and third world countries
- The world is a layer of data, put on top of the experiential world
- How digital media has changed our view of the world

**In-class question: How do “old” media differ from “new” digital media. Is there a difference?**

**Use your own experiences with both types of media in developing your answer**

- Old media was given to us (computers and radio)
- New digital media we have a choice what we read, watch or listen to

## **Lecture 2: January 14th**

### **Primary Characteristics of Digital Media**

#### **1) Computerized**

- a) Of a computer; on a computer.
- b) Computer: A machine that transforms information with a particular end in mind
- c) Input leads to output following a particular set of rules.
- d) Programmable; make the computer execute certain tasks for us
- e) Calculation can be automated; repeated over and over at high speed, saving us labor in the long run

### **Evolution of the Electronic Computer**

- Vacuum tubes; found in old radios: [https://en.wikipedia.org/wiki/Vacuum\\_tube](https://en.wikipedia.org/wiki/Vacuum_tube)
- Transistors; a type of semiconductor that is used to amplify or switch electronic switches/ power (Think transistor radio): <https://en.wikipedia.org/wiki/Transistor>
- Integrated circuits and microprocessors; more chips on a board make the computer more powerful; these lead to personal computers because became less expensive

### **Electronic Digital Computer**

- An electronic digital computer stores data in terms of binary digits - bits (8 bits = 1 byte)
- Bits take the form of the presence of absence of electronic markers in a storage medium
- In digital computing all information- including letters, words and images- are initially represented digitally

## Digital Representation

<u>BCD</u>	=	<u>Decimal</u>
0000	=	0
0001	=	1
0010	=	2
0011	=	3
0100	=	4
0101	=	5
0110	=	6
0111	=	7
1000	=	8
1001	=	9

## ASCII Digital Representation

A= 01000001 B= 01000010 Etc etc...

## Benefits of Digital Information

- Digitized information can be easily manipulated, copied, stored, & compressed
- It can also be electronically transmitted instantaneously
- Non-digital or continuous information (analog) can be digitized
- And therefore may be readily manipulated by digital computer processes

## Manovich's 5 Key Features of Computerized Media

### 1) Numerical Representation

- The representation of all new media objects as digital code
- Numerical representation renders "all media programmable"
- New media objects are able to be described mathematically, and new media objects are subject to algorithmic manipulation
- **Algorithm**: a procedure of formula for solving a problem (ex. The instagram feed algorithm; which posts you see first on your feed)

### 2) Modularity

- The degree to which a system's components may be separated and combine
- They each function separately and jointly with other parts
- The structure of a *web page* for instance, contains many elements that can be manipulated
- Images, text, videos, all are stored separately but function as a whole

### 3) Variability

- A digital product is not fixed, but can exist in different, potentially infinite, versions
- The elements and the structure are by definition, independent of each other
- Variability is a consequence of numerical representation and modularity

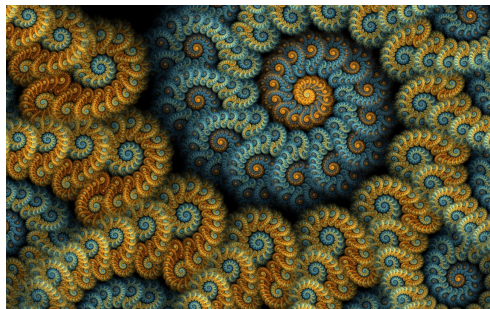
#### 4) Automation

- Computers allow us to externalize and repeat human capabilities, over and over again
- **Examples:**
  - Low level automation: auto-complete (selects a word based on what you have already typed)
  - High level automation: Artificial intelligence; learns from your behavior and adapts to it- EG” Chess computers attempting to mimic the human mind in order to beat you at chess

#### 5) Transcoding

- “Since new media is created on computers, distributed via computers, stored and archived on computers, the logic of a computer can be expected to have a significant influence on the traditional cultural logic of media. . . . The result of this composite is the new computer culture: A blend of human and computer meanings” - (Manovich, p.63)
- The cultural layer becomes computerized
- The computer layer becomes culturalized

**Fractal:** A fractal is a natural phenomenon or a mathematical set that exhibits a repeating pattern that displays at every scale. It is also known as expanding symmetry or evolving symmetry (sort of like modularity)



#### Transcoding & Computerized Culture

- “The computer has become less of a tool and more of a **Universal media machine**”

**Video: Digital Nation: Life On The Digital Frontier:**

<https://www.pbs.org/wgbh/pages/frontline/digitalnation>

**“Digital media and the world wide web have transformed virtually every aspect of modern culture”**

**But is the technology moving faster than we can adapt to it?**

- f) I think we can adapt pretty well to the fast paced technological developments, but with this skill also comes negative consequences
  - i) We spend so much time adapting to new technology and focusing so much on the digital world, while we ignore the then and now

**And is our 24/7 wired world causing us to lose as much as we've gained?**

- g) Our parents grew up in a world where they communicated face to face and made plans either in person or over a short phone call (so as not to cost too much money), nowadays many don't know how to hold a face-to-face conversation
- h) We are no longer aware of our surroundings, trapped in the cyber world

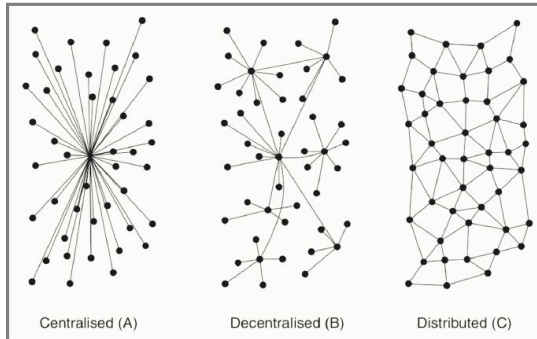
**Do we think things have changed since this film?**

- i) Since this film I think we have almost worsened in our internet addictions
- j) Multitasking a lot more

**Lecture 3: January 21st**

**2) Networked**

- The internet is a distributed, packet-based network
- A distributed network (centralized, decentralized, distributed)
- Each type of networks has its benefits and setbacks.
  - Centralized- All people could be disconnected if one part becomes damaged
  - Decentralized- A group of people might become disconnected if one part becomes damaged
  - Distributed- Best network, since if one part goes down it can be directed to a different part of the network and be “rerouted”



### Distributed Network

- **Centralised Networks:** defined by the presence of a central, dominant node
- **Decentralized Networks:** A limited amount of main nodes, horizontally connected with one another act as hubs for the peripheral nodes.
- **Distributed networks:** numerous independent nodes are all horizontally connected with one another and no single connection constitutes the sole path between two points
- So, with a distributed network, there are many ways to reach one's destination - *redundancy*.
- If part of the network is destroyed or malfunctions there are multiple alternative routes - *survivability*
- The more computers connected, the more efficient and resilient the network - *benefits of scale*
- Facilitates *many-to-many interactivity* (instead of one-to-many)

### Packet-based

- A message is digitized and separated into a number of message blocks or "packets"
- Each packet contains instructions for reassembling the message...
- ... and for directing it to follow the most efficient route to its destination
- Once they have arrived the packets are collected, reassembled by the receiving computer

### Implications

- Networking extends computer processes in space and time
- The computer becomes a resilient and flexible communication media
- A channel of distribution,
- As well as an information processing and media production machine
- Connectivity has become part of our imagination
- But do we need to ask: Connected to what?

### Research Essay Proposal Information

- 2000 word, critical research paper, double spaced, no title page, times new roman, 12pt

- Connect ourselves and how people use digital media and what implications it has on society as a whole
- Do not do facebook, twitter, or instagram
- Can use pronouns (not just opinion, but make arguments supported by research)
- **Proposal to do: (no more the 750 words, write word count at beginning of paper)**
  - Descriptive title
  - Thesis statement
  - A brief literature review (1-2 paragraphs)
  - Statement as to how your argument is different from other authors
  - Bibliography (at least 5 sources outside of course material)

## **Lecture 4: January 28th**

### **Secondary Characteristics of Digital Media**

- Computerized (primary characteristic of digital media)
- Networked (primary characteristic of digital media)
  - a) Interactive
  - b) Hypertextual
  - c) Convergent
  - d) Personalized
  - e) Open
  - f) Recombinant

#### **(1) Interactive**

- Many-to-many interactivity
- Media users gain the ability to directly respond to and act upon a message
- The consumer can now become a producer
- The receiver becomes a sender
- We conceive of new media audiences as more active than with older media
  - Eg” Government of Canada website, in which a new government displays information and hides other information from the previous government (Not interactive?)
  - Interactivity should not be conceived as “power for all” but that we can be shaped by the information we are receiving; sometimes not aware of

#### **(2) Hypertextual**

- What is a text?
  - Single, self contained work
  - Has a beginning, middle, and an end. In other words, a text or image is like a story.

- Has an author?
- What is a “hyper” text?
  - HTML= Hyper Text Markup Language, a url that a web page is on
  - Links tied to images, buttons, menu items, etc. A piece of text with a link on it; when you click it you are taken to a new web page, website, article, etc.
  - Challenges all of the ideas of a text
  - Doesn’t read like a traditional text, allows jumping around
  - Many authors, sometimes no credited author; we can be the author
  - Produces meaning
  - Bluray – extras, bloopers, deleted scenes
  - Many texts linked to many other texts
  - A text that is open ended and constantly being written
  - Multiple authors, no one authoritative voice

### **As We May Think (1945)**

- Visionary article by Vannevar Bush
- The amount of information is being “expanded at a prodigious rate”
- But the means we use to find it is “the same as was used in the days of square-rigged ships”
- We need to move away from hierarchical systems of organization
- And adopt new techniques that reflect how the actual brain works – lateral thinking

### **Memex**

- “the human mind...operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain.... The speed of action, the intricacy of trails, the detail of mental pictures, is awe-inspiring beyond all nature”

### **Hypertext**

- What is a hypertext?
  - Many texts linked to many other texts
  - A text that is open ended and constantly being written
  - Multiple authors, no one authoritative voice
- Netflix Example: Bandersnatch; Choose your path movie with multiple endings

## **WWW as hypertext**

- HTML ( Hyper Text Markup Language): A computer-based system for laterally linking texts to other text
- When activated, linked documents are instantly retrieved and displayed
- The linked document, itself, contains links to other documents, and so on, ad infinitum
- Rhizomatic (rhizome – a root like structure)

## **(3) Convergent**

- All media becomes digitized and can be operated on by the computer
- Images, text, audio combine together into one generalized computer media
- Modularity and variability comes to define all media
- Corporate convergence (Not talking about this)

## **(4) Personalized**

- Modularity and variability allow the user experience to be personalized for each individual
- Our computer interface become our “daily me”
- Social media and mobile devices – i.e. smartphone – emphasize this individualization and personalization

## **(5) Open**

- Historically, the distributed network has tended towards openness of access and movement
- We have been able to travel almost anywhere in the network
- Modularity encourages the constant addition and transformation of objects and culture
- There is a proliferation of information
  - Everyday new stuff is posted online
- Exclusive property rights have been challenged by the ease of copying and distribution
- Cultural objects themselves have become “open” to use and manipulation by everyone
  - We can rip a movie from a DVD to our computers to re edit them into a new version (fan edited movies)

### **In-class Question:**

Is the computer network still tending towards openness or not? Please give examples to support your position.

- The network could begin to look closed based on government trying to control a bit more
- But for the most part it is still open since we are able to post and search for almost anything we want
- Youtube though is in between, they can take down what they don't like, but for the most part we could post anything we want on Youtube

### **(6) Recombinant (Remix)**

- RiP ! – A remix Manifesto (Start at 2:00)
- We live in “remixable” culture; a cut and paste society
  - Example: Photoshop, create photos that didn't exist before
- Modularity and variability mean customization
  - Combine them back together again, into a new thing
- Digital culture is constantly reworked, recombined, and remade
- This is an extension of a modernist aesthetic seen in cinematic montage and photo collage
- And it challenges existing laws about originality and ownership
- Kennedy painting (1964) – Robert Rauschenberg

### **4 Uses of Digital Media**

1. As an information utility
2. As a communication utility
3. As a cultural utility
4. As a control utility

\*\* not mutually exclusive

#### **1) Information Utility**

- Allows the easy and timely storage, dissemination (the spreading of things), and retrieval of information
- The internet as database and search engine
- Allows individuals to gain what was once considered expert-only knowledge
- Ideal for research, provision of government information and financial services, etc.
- Apple data farm, North Carolina, google data farm, Iowa

## **2) Communication Utility**

- Allows instantaneous, interactive communication
- Email, chat, peer-to-peer, social media
- This communication can be communal, social, economic, or political
- Shapes “virtual community” and “social networks” beyond one's immediate location in space

## **Lecture 5: February 4th**

### **4 Uses of Digital Media**

#### **3) Cultural Utility**

- Human culture is made by, distributed via, and viewed through the computer and its operations
- And the computer is increasingly understood in cultural terms
- “Intel Batik” – Video ad, documentary
  - Showing that computers can also support culture

#### **Mr. Robot Clip, “Daemons” SE1EP04**

- Daemons are programs that run in the background and are “always there” and “always active” while “we're busy doing other shit”
- “They perform action without user interaction, monitoring logging notifications, primal urges, repressed memories, conscious habits”
- Computers inform how we think about ourselves

#### **4) Control Utility**

- Control = purposive influence toward a predetermined goal
- Communication, information and culture come together in the concept of control
- Used as an instrument of control by business and government
- For mass production, distribution, consumption, and bureaucratic organization
- Individuals also enjoy “more control”
- ...when they experience the convenience of online banking or shopping
- When they organize politically online

## **The control revolution book (1989)(2000)**

### **Digital Dreams**

- Cyberpunk dystopia: Out of our control
  - ex) Terminator 2, computer takes over
- Computer as a “freedom” machine
- In both instances the computer/digital media technology is a means of control
- With a different answer to the question of just “who is in control?”

## **Lecture 6: February 11th**

### **The Human Computer Interface**

1. The Screen
2. Software and the Graphical User Interface

### **The Screen**

#### **1. The classical screen**

- Rectangular frame
- Two dimensional
- Perspective grid
- Portrait/landscape orientation
- Static, captures past moments
- Screen is a restriction of what can be shown, Frame limits what we can see
- ex) painting, photography

#### **2. The dynamic screen**

- Rectangular frame
- Moving pictures
- Combines images using montage/editing
- Manipulates time
- Captures past moments and moves into the future
  - Both the classical and dynamic screens both imply a window opening upon another world – they “re present” reality, the reality is shaped for us
  - They relate the viewer to the perspective of a particular point of view (camera or artist)

- The viewer must be held in place or immobilized in order to see this world as intended
- The Draughtsman's contract movie (Peter Greenaway, 1982)
- We exist in “front of” a represented world as spectators

### 3. The real time screen

- Radar, the computer
- Captures the present
- Represents movement in a representation of space

### The Real Time Computer Screen

- The computer screen is experienced as a real-time event we interact with, or act upon, the screen
- It is an ongoing performance of which we are, ourselves, an integral part
  - Ø Navigable Space
    - The computer specializes representation
    - And we, the user, move within that space interacting and operating upon it
    - New media spaces are spaces of interactive navigation
  - Ø Multiple Screens
    - The computer screen is also composed of multiple, layered screens
    - Which we can rearrange and reorder
    - The computer fractures or fragments the classical screen

### Touch Screens

The addition of touch, or tactility, leads to:

- More immediate physical interaction with the device
- Touch creates a greater feeling of intimacy and connection
- More egalitarian due to ease of use?
- Further hides the work that goes into the software and hardware

### Beyond The Screen

- **Virtual reality**
  - Virtual reality interfaces challenge the very existence of the screen or frame
  - We are within, rather than in front of the cultural construction
- **Augmented reality**

- Projection of a layer of information on top of a reality itself
- ex) Microsoft Hololens

## **Software**

- “The invisible glue that holds us together” – Manovich
- Mediates our interactions with computerized media
- Organizes the internet
- Run warehouses and production lines
- Controls the flight of missiles, drones, etc. (Military tech)
- Software is at the heart of a global information society

## **Computer Layers**

1. Hardware
2. Firmware\*
3. Operating system\*
  - GUI (Graphical User Interface)
4. Applications\*
5. Content\*

\*\*\*2 -5 are considered the software

## **Graphical User Interface (GUI)**

- Microsoft Word for Dos, macOS 1.1, MS Word for Mac 5.1, Windows Version 3.11

## **Desktop Metaphor**

- A visual and spatial representation of an office desktop
- Folders, file cabinet, documents, trash can
- Ordered
- Hierarchical
- Standardized
- Menus, lists, icons

## **Other Interface Metaphors**

- **The print metaphor**
  - Pages, scrolling
- **The cinema metaphor**

- Moving images, a window on the world
- Both are representational and immersive

### **The Human Computer Interface (HCI)**

- The HCI is unique in its own right as well, not just representational
- We do not simply passively view the computer interface
- We interact with the computer through the mouse, keyboard, the touchscreen and the GUI
- And through this interaction we make it do what we want it to do
- The HCI is a control mechanism, as well as a representation

### **Lecture 7: February 25th**

#### **The Database**

- An organized collection of data
- A computer database is software that stores digital data in retrievable, sortable records
- They appear to the user as "... collections of individual items, with every item possessing the same significance as any other" (Manovich, 218)
- And we can then perform various operations on these stored items
- Retrieve all records that match certain criteria
- Update records in bulk
- Cross-reference records in different fields and table
- Perform complex aggregate calculations upon stored items

#### **1) The database as control**

- The database is at the heart of capitalist-bureaucratic-administrative society
- All forms of modern large scale organization and control rely on keeping records
- The computer database is the ultimate records archive
- It has intensified the modern process of rationalization and control
- Stores aggregate information about individual behaviour
- This is gathered both with and without our knowledge and compliance
- General social models are then constructed
- Decision are made based upon these models

- The model used to constitute a profile of the individual
- And to define “normal” or “deviant” behaviour
- The models attempt to predict future behaviour
- And to minimize risk in the decision-making of those collecting the data

## 2) The Database as Culture

- Almost every new media object is an interface to a database
- Spreadsheets
- Blogs
- Smartphone apps
- Databases are “a new symbolic form for the computer age” (Manovich, 219)
- **We live in a Super panopticon**
  - Mark Poster has called the database a “super panopticon”
  - The tracking of “personal traces” replaces “embodied surveillance”
- **The “iron cage” of bureaucracy**
  - Max Weber

## The Database vs Narrative

- We can compare the symbolic form of the database to that of the narrative
  1. A **database** represents the world as a collection of initially unordered items
  2. A **narrative** gives us a story that structures items/events following a beginning, middle and end
    - It is the software interface and its operations that structure and makes sense of the database for us

## New database-based media

- The traditional media object has one interface per object
- For example – a sculpture has “one interface” – the sculpture itself
- However, with digital media there can be multiple interfaces to the same data set
- Ultimately, the database object is governed by process and variability

## Film: **Almost Real: Connecting in a Wired World, Ann Shin, NFB, 2002**

- Are online or virtual experiences and interactions inferior to real life experiences and interactions? Why or why not?? What is the documentaries position?
  - No, People will still need to be with one another physically

- The little boy who was homeschooled missed the human interaction he has at real school
- The woman who had the online relationship felt like the man on the webcam did not truly know who she is
- The couple who lived in the wired house for the elderly felt like they were not at home with all the technology surrounding them; the Internet is just a tool

## **Lecture 8: March 4th**

### **Software Operations**

1. Selecting
2. Compositing
3. Tele-action

#### **Selecting**

- Pre-existing elements are selected before they are combined to create a new object
- Image banks (Getty images)
- 3 magazine ads – using same suburban home image in different ways

#### **Compositing**

- Assembling together a number of elements to create a single seamless whole
- Smoothness and continuity is emphasized
- Different than cinematic montage
- Elements not just juxtaposed but blended together
- Examples: Star Wars and Great Gatsby video and Game of Thrones

#### **Tele-action**

- Real time communication vs re-presentation
- *Tele* – means at a distance
- *Tele-presence* is the ability to be present at a location far away
- *Tele-action* is the ability to act at a distance upon that location
- With the digital network, tele-action replaces tele-presence
- The difference between tv and the computer is that the latter allows us to touch that distant world

## **Listening Post**

- Selecting phrases based on specific parameters (I am), compositing them into a room/space/interface, that you are experiencing when you are standing in front of the art installation (global network)

## **Implications**

- What implications may software operations have for culture?
- It shows why the computer operations of *selection* and *compositing* are important culturally
- The self & the world becomes modelled upon the information archive
- It emphasizes process & variability as an important part of our cultural experience

## **A Digital Aesthetic**

- "...endless recycling and quoting of past media content, artistic styles, and forms becomes the new 'international style' and the new cultural logic of modern society" (Manovich 131)
- "Reality" is not a given, it is about assembling and reassembling

## **Virtual and the simulation of "reality"**

- Call of duty – advanced warfare
- Second Life (realistic avatars)

## **Virtual – the "Almost Real"**

### **Dictionary definitions:**

- 1) Existing or resulting in essence or effect though not in actual fact
- 2) Existing in the mind, especially as a product of the imagination
- 3) Created, simulated or carried on by means of a computer or computer network

## **The Digital Virtual**

- The body resides in one place while one experiences another, computer-generated place
- Immersion into the textual and graphical interactive environment of the computer
- A type of digital re-embodiment or self-transference

## Virtual Reality & Immersion

- **Immersion:**
  - A state of consciousness where a participant's awareness of their physical self...
  - ...is transformed by being surrounded by an engrossing environment
  - Widely used for describing "the suspension of disbelief" in a virtual environment

## Virtuality & the simulation of reality

- Holodeck video example
- Mortal Kombat example
- Anthem example
- LA Noire example

## Synthetic (visual) Realism

- Representing reality to individuals...
- ...as if it was being directly experienced
- A cultural goal beginning with painting and continuing with photography, cinema and now computers
- Has generally privileged *visual* illusion
- Examples: Perspective drawings, video game imagery

## 3 Motivations Behind Synthetic Realism

- 1) An innate human desire to strive towards the ideal of visual experience (Bazin)
- 2) An ideological form that hopes to make you think what you see is what you get (Comolli)
- 3) The result of professional competition within the image making business (Bordwell & Staiger)

## Lecture 9: March 11th

### The Virtual Beyond the Visual

- The virtual, however, cannot be reduced to just the visual simulation of real or fantastic worlds (synthetic realism)
- The "reality of virtuality" is also based on its psychological or emotional impact
- The degree to which we psychologically **identify** with our avatar, with other virtual individuals, objects & worlds

- The degree to which we are emotionally and intellectually engaged by game play and narrative
- Vividness, involvement, engagement

### **Virtual Reality Therapy**

- Skin burn victim, and snow world

### **Virtual Engagement *Beyond* Immersion**

#### **Immersion vs. Interaction**

- Our virtual experiences are never completely immersive
- Manovich argues that there is a movement between immersion (transparency) and interactivity (opacity; being able to control the game we are apart of)
- The interfaces in most virtual spaces combine the immersion of synthetic realism...
- ...and the menus, lists, control panels, etc., that refer specifically to computer operations
- In the latter case, it is the interactivity and control that draws us in, and engages us with the experience
- Augmented reality, layers information and these controls over the physical world itself

#### **Multiplying Realities**

- What also challenges the immersive powers of virtual reality is...
- ...our understanding that there are numerous “realities” that we engage with in our lives
- First, there are the offline and online worlds
- Second, there are a variety of computer generated spaces, multiple windows multiple worlds
- Multiple virtualities = multiple realities

#### **Should video games be considered art?**

- NO
  - Ebert, screenwriter and movie critic: “Video games can never be art”
- YES
  - Kellee Santiago, a designer and producer of video games: “Video games can be art”

#### **Ebert Argument**

- 1) You can win a game

- 2) You cannot “win at” art
- 3) Games have rules, points, objectives and an outcome
- 4) Games are purposive, in a way that art is not

### **Ebert on Video games and art**

- “My notion is that art grows better the more it *improves or alters* nature through a passage through what we might call the artists soul or vision” (Ebert)

### **Santiago’s Argument**

- Agree with Ebert, but thinks games can be art
- New medium of expression
- New cultural form

### **Exhibition: The Art of Video Games**

- Advertisement

### **Video Games and art**

1. Video games stretching the aesthetic form (Rez, 2007)
2. Video games in art (Mark Essen, 2012)
3. Video games that break video games conventions (Journey, 2012)

### **The video game as a complex hybrid cultural form that can aspire to be art form**

- Computer graphics/animation
- Sound/music
- The database form
  - Selecting - compositing
- Navigating (computer) space, a virtual world that can extend forever
- Interacting – co-producing, controlling what is happening in the game
- Hypertextual narratives; you have many path and different stories in the game to choose from

## **Lecture 10: March 18th**

### **Gamification**

- Gamification is the application of game principles in non-game contexts
- Business, marketing, environment, government, health, etc.
- Uses the human gratification derived from rewards, competition, goal and status achievement to motivate users
- Used in attempts to, variously, solve problems, increase sales, as therapy, improve productivity, and encourage learning

### **Fold It**

- “Foldit is a revolutionary crowdsourcing computer game enabling you to contribute to important scientific research in the folding of protein molecules”
- Over 240,000 “players” competing against each other...
- ...found a solution to the structure of the M-PMV(irus) in 10 days, creating a major breakthrough in AIDS research

### **Pain Squad**

- The pain squad app is for 8-18 year old to trace pain related to cancer
- The pain squad app rewards you for using it! Climb the ranks by tracking your pain every day

### **Sesame Credit**

- A Chinese “social credit” system that is meant to rate each citizens trustworthiness
- Based on data collected from Alibaba, the worlds biggest online shopping platform
- What you buy is ranked and given a score

### **Gamification Pro's**

1. Provides instant feedback
2. Increases engagement
3. Creates enthusiasm
4. Encourages loyalty
5. Facilitates social connections
6. Harnesses collective intelligence

## **Gamification Con's**

1. Costly
2. Susceptible to bad design
3. Panders to immediate gratification
4. Can lead to a decreased attention span
5. Fosters an environment based on competition
6. Novelty can wear off
7. Dominated by business/marketing concerns

## **Online Sociability**

1. Virtual community
2. Networked individualism

## **What is Virtual Community?**

### **Community and Society (1887) (Gemeinschaft and Gesellschaft)**

- Ferdinand Tonnies

#### **Community (Gemeinschaft)**

- Strong ties dominate
- Tied together by obligations of blood/kinship
- Mutually interdependent
- Multi-dimensional ties
- Founded in proximity and place
- Historical and spatial ties

#### **Association (Gesellschaft)**

- Weak ties dominate
- These ties are rational and calculated
- Based on choice, contract, and convenience
- Ties become specialized
- Relations are mediated by symbols
- Disembedding of social relations from time and place
- Detraditionalization

## **Virtual “Community”**

- Communities of transaction (ex. Kijiji, ebay)
- Communities of shared interest (ex. Hobby groups)
- Communities of fantasy (ex. Second Life game)
- Communities of relationship (ex. Dating sites)

## **Networked Individualism (Termed by Manuel Castells)**

- A-spatial (not based in a particular space)
- Voluntary or intentional
- Instrumental or rational
- Tenuous
- Open-ended
- Associative understanding of human relationships

## **Lecture 11: March 25th**

### **Take Home Exam Details**

- **Part one**
  - 2 short answer questions (300 words each, double spaces, 10 pts each, 20pts total)
- **Part two**
  - One essay question (750 words, double spaces, 20pts) in part 2 you answer 1 of 2 questions provided

The exam is marked out of 40 and is worth 20% of the term mark

The exam will be made available as pdf by noon Tuesday April 9th, the pdf will be password protected and unprintable

Your answers should be

You will have 4 days to complete exam

Completed and submitted to dropbox no later than 8pm on Friday april 12th , no hard copy

Times new roman, 12 pt. font, double spaced, no title page, add word count at end of each response

Try not to quote or paraphrase, but if you do, cite. Do not use extensive quotes. But try to put everything into own words

### **Digital culture as participatory culture**

- *Henry Jenkins* on participatory culture
- The 501<sup>st</sup> legion: Vader's fist
- Star Trek

### **Digital Popular Culture**

- Media users are active participants in the digital media
- A product of both corporate convergence (and their focus on "pre-sold" media)...
- ...and new digital grassroots tools like the camcorder, digital editing and internet distribution
- Prosumer, produsage, etc.
- Creation, distribution/circulation and collaboration are key

### **Participatory Culture**

- People work on mass produced culture in individualized and personalized ways
- This fan production is often non-commercial
- They *appropriate* official mass produced culture for their own ends
- Buying the original product is only the first step...before someone makes it their own
- It is then spread to others in the network

### **Henry Jenkins: A new "folk culture"**

- Popular culture acts as a shared symbolic framework that facilitates social communication
- A return to a "folk culture" understanding of cultural creativity as participation
- Culture becomes "the people's culture" rather than just the culture industries
- Encourages a cultural creativity – a creative commons – that can be distributed afar
- Overcomes the reification of the culture industry?

### **A Third Space for Culture**

- According to Jenkins, fan cultures constitute a third space...
  1. Between the official commercial culture

2. And explicitly anti-Hollywood, *Avant Garde* or art house movie making
- Participatory culture can be about commenting on or celebrating commercial culture...
  - ...but it can also contain a degree of the critique that art often aspires to

## **Lecture Week 12: April 1st**

### **Detournement**

- A term used by Guy Debord and other “situationists” in the 1950’s
- ...refers to a critical cultural practice in the age of media spectacle
- The playful reuse of pre-existing cultural elements in a new ensemble often critical of the originals (and the culture at large)
- Example of Pope Innocent X

### **2 Fundamental Laws of Detournement**

1. A loss of importance for each of the “detourned” autonomous element
2. The organization of another meaningful ensemble that confers on each elements a new scope and effect

### **Digital Media & Participatory Culture**

1. Interactive
2. Convergent
3. Personalized
4. Open
5. Recombinant

### **Copyright**

- Copyright: A set of exclusive rights granted by the law to the creator of an original work
- ...including the right to copy, distribute and adapt the work
- These rights are for a limited time, however, in an attempt to:
  1. Encouraging individual creativity
  2. While at the same defending the public interest in a creative common culture

### **Limits to Copyright**

- Limits to copyright include:
  - Fair use (US), or, fair dealings (CAN) – Research, private study, criticism
  - For purposes of reviewing
  - Education

- News reporting
- Parody and satire

### **Fan Culture and Copyright**

- Most fan products are considered derivative works
- They are often creative modifications to an existing copyrighted work
- Some or all of these works may fall into the legal category of transformative works (satire, parody)

### **Bill C-11: Copyright Modernization Act**

#### **User generated content:**

- Users are permitted to create their own content by combining or using existing copyright material
- This is called the “Youtube Clause”
- Allows users to create a “mashup” of clips as a new work, or add music

#### **This exception is subject to certain conditions:**

- Non-commercial purpose
- Mention of the source (where reasonable)
- The individual’s belief that the source material was non-infringing
- Absence of any “substantial adverse impact” on the copyright holder’s property

### **Informational Politics**

1. Hackers
2. Protocol
3. Repressive and emancipatory media

### **Hackers: From utopian to terrorist**

- **Early utopian hacker ethos**
  - Sharing
  - Openness
  - Free access to computers
  - All information should be free
  - Mistrust authority – promote decentralization of knowledge and network
  - Hackers should be judged by their hacking
  - Computers can change our life for the better
- **The fall from grace**

- White hat(good hacker) – grey hat (ambiguous hacker) – black hat (bad hacker)
- Crackers as online vandals and criminals
- Hacking as a training ground for corporate America
- Hacking as international espionage
- **The return? Hacking as hacktivism**
  - The use of digital technology to publicly communicate or further a political cause...
  - ...through the unauthorized use and/or the disruption of a computer service
  - The marriage of hacking and political activism
  - Ex: Zapatista Rebellion (1998)
    - One of the first documented events of modern hacktivism
    - A “dedicated denial of service” (DDoS attack) against the President of Mexico’s website
    - To protest and gain publicity for the mistreatment of Zapatista rebels in Chiapas
    - Hackers from around the world participated

### **Hacktivism as Civil Disobedience**

- Civil disobedience (Rights/Justice theories)
- John Rawls defines civil disobedience as:
  - “A public, non violent, conscientious yet political act contrary to the law usually done with the aim of bringing about change in the law or policies of the government”. A Theory of Justice (1977)

### **Justification for Civil Disobedience**

- The law or policy being objected to must be a clear and substantial injustice
- And violate the natural rights of citizens
- The action itself must not provoke unjust violence
- The action should advance the ends addressed

### **Cyber-terrorism**

- “...attacks and threats of attack against computers, networks, and the information stored therein when done to intimidate or coerce a government or its people in furtherance of political or social objectives”
- “It covers politically motivated hacking operations intended to cause grave harm such as loss of life or severe economic damage” – Dorothy Denning

## **Protocol**

- A set of computer instructions that define a particular way to reach a certain outcome
- "...a set of technical procedures for defining, managing, modulating and distributing information through a flexible yet robust delivery infrastructure" (Galloway)
- As code, protocols are human made conventions...
- ...agreed upon by national and international bodies
- They standardize computer-mediated communication...
- ...to allow *certain* types of communication between computer platforms
- They are material technologies that support particular material, real life practices

## **Protocol as a new form of power**

- Control moves from national authorities to protocol standards
- The flexibility and interactivity of internet communication....
  1. Allows transnational corporations to influence the globe in a timely and all encompassing manner

## **2 Cases: The Double Nature of Protocol**

### **1. Transmission Control Protocol / Internet Protocol (TCP/IP)**

- Define how computers should be connected to the internet...
- And how data should be transmitted between them
- It allows communication between all of the computers that make up a network
- Anti-hierarchical
- Engenders localized decision-making
- Accommodates flexibility, variability, and change
- Allows unimpeded communication across computer platforms, national borders and global cultures

### **1. Domain Name System (DNS)**

- DNS is a "large decentralized database that maps network addresses to network names" (Galloway, Protocol, 9)
- The DNS database converts:
  - [www.name.ca](http://www.name.ca)
  - Into a numerical IP address on the physical network such as:
    - 130.63.236.137.

- According to Galloway, “all DNS information is controlled in a hierarchical, inverted-tree structure. Ironically, then, nearly all web traffic must submit to a hierarchical structure (DNS) to gain access to the anarchic and radically horizontal structure of the internet” (9)
- Any web site may be blocked at any level of the address
- Through access to the appropriate name server computer
- Geolocation and Geoblocking

### **Hacker & Protocol**

- Lowy calls the hacker the “protocological” *actor par excellence*
- Hackers are the masters of manipulating the computer code that is protocol
- The term “hacker” is value neutral
- The utopian hacker, the black hat criminal and the corporate security specialist are all hackers in this sense
- The hacker exists because the distributed network exists

### **Repressive and emancipatory media**

#### **1) Repressive use of media**

- a) Centrally controlled
- b) One transmitter, many receivers
- c) Immobilization of isolated individuals
- d) Passive consumer behaviour
- e) Depoliticization (instead of engaging the public)
- f) Production by specialists or experts
- g) Controlled by property owners or bureaucracy
  - i) Sounds like broadcast news (Fox, CTV), radio

#### **2) Emancipatory use of media (from Hans Enzensberger)**

- a) Decentralized (makes people more free and empowering them to do what they want to do)
- b) Each receiver should be a potential transmitter, we are also able to produce and distribute our own messages
- c) Mobilization of masses (or people), encourages people to work together towards a common cause
- d) Interaction of those involved - feedback
- e) A political learning process (tell us the importance of working with other citizens)
- f) Collective production

g) Social control by self-organization

**Or the Culture Industry Redux?**

- Corporations have come to realize the need to maintain strong audience connections
- Rely on collective production and collective intelligence of this culture
- ...so, they encourage this interaction – at least to a certain point
- But to what degree is this still an exploiting of the user and a commodifying of their cultural work?

**Cambridge Analytica, Politics & Big Data**

**WikiLeaks**