Computers & Media

CSCI 1200
JAREK SZLICHTA

HTTP://FACULTY.UOIT.CA/SZLICHTA/

'Twitter terrorists' face 30 years after being charged in Mexico

School teacher and radio presenter accused of spreading false reports that gunmen were attacking schools in Veracruz

Jo Adetunji and agencies
guardian.co.uk, Sunday 4 September 2011 23.12 BST
Article history

The panic generated by the Twitter reports was likened by Gerardo Buganza, the interior secretary for Veracruz state, to that caused by Orson Welles's 1938 broadcast of War of the Worlds. Photograph: AP

A man and a woman are facing 30-year prison terms in Mexico for allegedly using Twitter to spread panic over a series of child kidnappings.

Gilberto Martinez Vera, 48, a private school teacher, and Maria de Jesus Bravo Pagola, a radio presenter, were accused of spreading false reports that gunmen were attacking schools in the south-eastern city of Veracruz.

The resulting panic caused dozens of car crashes after parents rushed to save their children from schools across the city and jammed emergency telephone lines, which "totally collapsed" under the pressure.

Gerardo Buganza, the interior secretary for Veracruz state, compared the ensuing chaos to Orson Welles's spoof news broadcast War of the Worlds in 1938. The two are facing charges under terrorism laws.

http://www.guardian.co.uk/world/2011/sep/04/twitter-terrorists-face-30-years

International Human Rights Charter

Article 19 of the universal declaration of human rights states "everyone shall have the right to ... seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice."

http://www.reuters.com/article/2011/09/06/us-mexico-twitter-idUSTRE7857PN20110906

http://www.thenational.ae/news/uae-news/facebook-and-twitter-key-to-arab-spring-uprisings-report

Facebook riot calls earn men four-year jail terms amid sentencing outcry

Sentences handed out in Chester as lawyers and civil rights groups express alarm about 'disproportionate' punishments

Owen Bowcott, legal affairs correspondent, Helen Carter and Helen Clifton
guardian.co.uk, Tuesday 16 August 2011 23.02 BST
Article history

Jordan Blackshaw, left, and Perry Sutcliffe-Keenan, both pleaded guilty to using Facebook in attempts to fuel riots in Cheshire. They have been jailed for four years

Two men who posted messages on Facebook inciting other people to riot in their home towns have both been sentenced to four years in prison by a judge at Chester crown court.

Jordan Blackshaw, 20, set up an "event" called Smash Down in Northwich Town for the night of 8 August on the social networking site but no one apart from the police, who were monitoring the page, turned up at the pre-arranged meeting point outside a McDonalds restaurant. Blackshaw was promptly arrested.

Perry Sutcliffe-Keenan, 22, of Latchford, Warrington, used his Facebook account in the early hours of 9 August to design a web page entitled The Warrington Riots. The court was told it caused a wave of panic in the town. When he woke up the following morning with a hangover, he removed the page and apologised, saying it had been a joke. His message was distributed to 400 Facebook contacts, but no rioting broke out as a result.

http://www.guardian.co.uk/uk/2011/aug/16/facebook-riot-calls-men-jailed

Activity

Take 5 minutes to read online 4 posted articles and commentaries.

Consider:
- Would this be possible with traditional media?
- How could such issues be avoided in future?

Introduction

What is this course about?

- Impact of computers and technology on media
- Different media types, emphasis on digital media
- Computer technology, from a media point of view
- The media industry, production process, business models

Introduction

There is a very close relationship between technology and media

Media wouldn't exist without technology, not all of it is digital

New technology has often produced new media forms, or drastically changed existing ones

Need to discuss both of them together to get a complete understanding

Correspondence

Use Blackboard to discuss things with other students
- ◦ Ask questions and exchange knowledge!
- ◦ You can get bonus points (hence, improve your mark)

Take time when composing a message - think of it as a professional message to a co-worker.
- ◦ There will not be space for SMS-speak in your work life.

Use e-mail for correspondence

Course Outcomes

Discuss how the media landscape has changed in the past 50 years with the introduction of computer technology.

Apply principles of media theory to critique new forms of media on the basis of access, accuracy, participation, and other criteria.

Course Outcomes

Outline several examples of world events which were heavily affected by computer-based media.

Write and speak clearly about issues an challenges in the media industry, including issues of developing content for computer-based media.

Topics

1. Introduction to media

2. Technology and media

3. Media types

4. Digital media production

5. Distribution of digital media

6. Computer impacts on traditional media

7. Legal and ethical issues

8. Future trends

Course Text

Available at *http://mypearsonstore.ca*
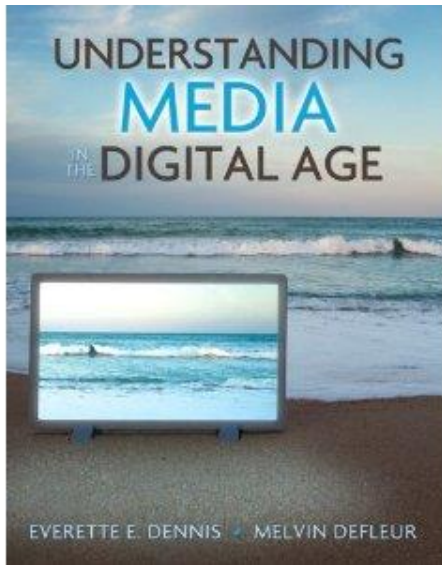
Everette E. Dennis & Melvin L. DeFleur. Understanding Media in the Digital Age (Pearson Education, 2010).

This book is the primary reference for the course material presented in the lectures.

Course Reference

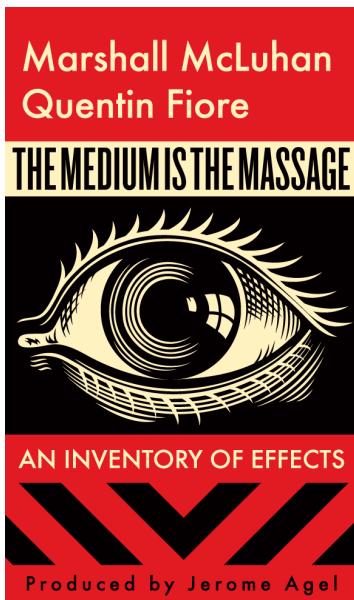Not required, but a useful reference.

John V. Pavlik. Media in the Digital Age. (Columbia University Press, 2008).

This book is a reference for the course material presented in the lectures.

Course Reference

Not required, but a useful reference.

Marshall McLuhan and Quentin Fiore. The Medium is the Massage. (Ginko Press, 1965).

This book is a reference for the course material presented in the lectures.

Structure of the course

Lectures: Twice a week, refer to www.uoit.ca/mycampus
Tutorials: Once a week - **First tutorial 22nd of September**
Midterm: One
Final: One
Assigments: Three

Marking:

Tutorials   10%
Midterm   20%
Assigments   20%   (10% + 2 x 5%)
Final   45%
In class activities   5%

Required Readings

Most weeks, 1+ required readings and/or videos will be posted on Blackboard

- Textbook passages
- Media articles
- Blog entries
- Research papers

They are *required*, as in *you have to read them*.

Readings will be included in the mid-term.

Lectures and Tutorials

In general the lectures concentrate on concepts and the tutorials on examples/ use cases

Examples are an important part of this course, not an optional extra, you will be examined on them

The examples are typically important works of media art, show how the media is used, evolution over time

Academic Integrity

You work must be your own: if you quote others, cite them appropriately.

You may not work together, except in tutorial.

Academic misconduct is a serious offense, and will be handled under UOIT policies.

◦ Note: 'allowing one's work to be copied' is an offense too.

Your Action Items

Think about other examples of people getting in trouble for participation in online media

Get a textbook!

Introduction to Media

1. The Development of Speech and Language
Between 90,000 and 35,000 B.C.

2. The Invention of Writing
Starting about 2500 B.C.

3. The Invention of the Printing Press
1455

4. The Beginnings of Mass Newspapers
Early 1830s

5. The Invention of the Electric Telegraph
1844

6. The Introduction of Films
About 1900

7. Beginnings of Home Radio
1920s

8. Wide Adoption of Television
1950s

9. Development of the Internet
1980s and 1990s

10. The Invention of Smart Phones (VoIP)
2000s

Historical Perspective

- How were our present media shaped by the events, trends, policies, and characteristics of society?

- How do our media select and process various categories of content?

- What assumptions and forecasts can we make about the media we will have in the future and what they will offer to their audiences in the years ahead?
  - How many of you would actually wear Google Glasses?

- As we walk through the course and consider different media types, we will consider these questions
  - Understanding the past helps to understand the future!

A Basic Model of Human Communication

- *Claude Shannon & Warren Weaver Model*
  - One of the earliest attempts to develop a model of human communication
- Bell Laboratories
- Improving signals with less chance for error
  - Was faced how to improve physical signals (eg., carried by telephone)
- Linear model of communication
  - Linear means following in a logical or progressive order (such as watching a movie from beginning to end)
- Advantage: simplicity
- Disadvantage: not interactive, transactional process of communication

The Shannon & Weaver Model
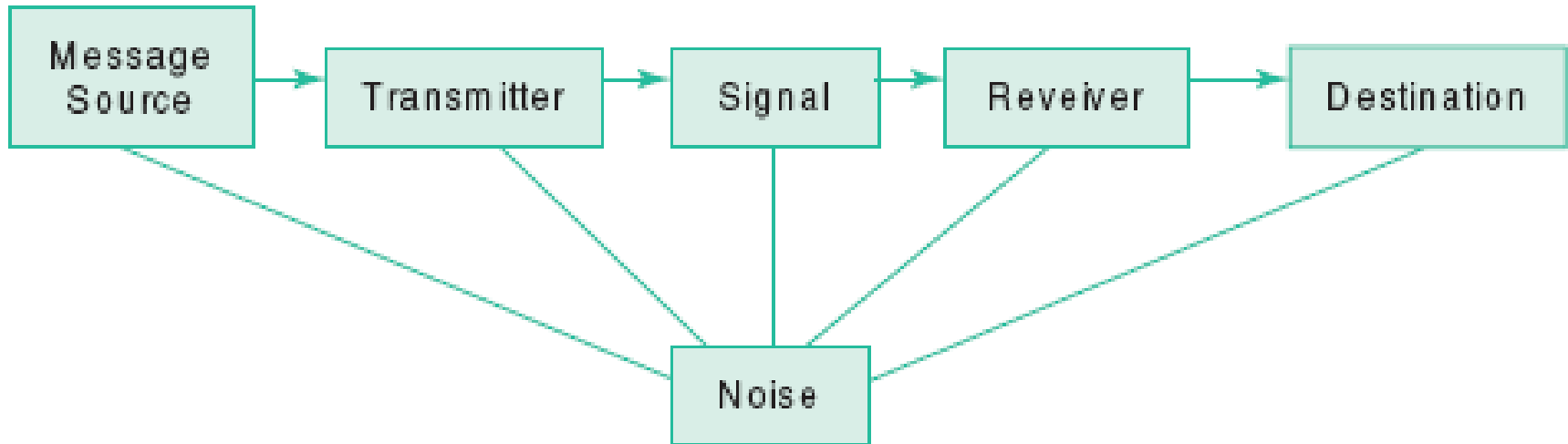
1. *The act of human communication begins with sender*
2. *Sender encodes the message (with words, specific gestures)*
3. *The message is transmitted (spoken, written) between sender and receiver*
4. *Receiver, attend to and perceives the message*
5. *Receiver decodes the message (by constructing interpretation)*
6. *As a result receiver is influenced (affected)*

Channel

- Encoding/Decoding
  - Grammar rules: "The boy killed a snake" versus "A snake killed a boy"

- Noise
  - *Noise can occur (poor acoustic, memory failure, disruptive sounds, cultural differences etc.)*

Communicating Accurately

- Shannon & Weaver developed important concepts

- The Accuracy Principle
  - the level of mutual understanding between sender and receiver

- The Feedback Principle
  - leads to a greater accuracy

- The Role-Taking Principle
  - sender plays a role of receiver too at some moment

The Accuracy Principle

The lower the level of correspondence between the intended meaning of the sender and the interpreted meanings of the receiver, the less effective an act of communication will be in achieving either mutual understanding or intended influence.

The Feedback Principle

- If ongoing and immediate feedback is provided by the receiver, accuracy will be increased.

- That is, the intended meanings of the communicator have a better chance of being similar to those constructed by the receiver.

The Role-Taking Principle

- In communication situations where the sender can engage in sensitive role taking, accuracy is increased.

- That is, meanings intended by the sender more closely match those constructed by the receiver.

The Mass Communication Process

Media technology creates the ability for a sender to communicate information to a larger group of individuals, or a mass audience

Developing a concise definition of mass communication

- **senders** are professional communicators

- intended meanings are **encoded** by specialists

- message is **transmitted** by specialized media

- large and diverse **audiences** decode the information

- individual receivers in the audience interpret **meaning** from the information

- receivers are **influenced** in some way by the information

Developing a Concise Definition

Mass communication is a process in which professional communicators design and use media to disseminate messages widely, rapidly, and continually in order to arouse intended meanings in large, diverse, and selectively attending audiences, in attempts to influence them in a variety of ways.

Mass Media

TABLE 1.1

YEARS TAKEN TO REACH 50% OF U.S. HOUSEHOLDS

Newspapers	100+
Telephone	70
Phonograph	55
Electricity	43
Cable	39
FM Radio	30
Color Television	17
Personal Computer	17
Compact Disc Player	15
VCR	10
AM Radio	9
Black & White TV	8

Smart phones? 45 million homes in 2011 (38%)

Source: John Carey as compiled from Electronic Industry Assn., U.S. Department of Commerce, Dataquest.

http://review.accessorygeeks.com/news/report-45-million-u-s-homes-own-smartphones/26807

Which Media are the Mass Media?

- Publishing (books, magazines, newspapars)

- Film

- Electronic Media (radio, television, cable television, DVDs)

- How about telephone?

Consequences of Using Any Medium

- Loss of accuracy

- Lack of immediate feedback

- Limitation on effective role-taking

The Consequences of Large, Diverse Audiences

- aggregated audiences (*many distinct individuals*)

- limited attention span
  - audiences range from the lowest wage earner that is not targeted by advertiser to the wealthiest and most attractive individual that might be the most sought after member of the audience

- proffesional communicators most of the time assume people prefer to be entertained, rather than enlightened (e.g., Soap Opera, Big Brother etc.)

- loses interest in any subject that makes intellectual demands
  - Critics want a different content

What is New Media?

Traditional media is the basis for most media theory, up until the last decade

Examples of new media:
- Internet
- Computer games
- Computer animation
- Special effects
- Blogs, wikis, Facebook, Twitter etc.

New Media

- Digital Media
  - Media that store digital data
  - Digital data, data that is represented using discrete values

- Democratized
  - accessible by everyone

- Participatory

- Dynamic / Changing content

  - Providing the opportunity for people to be involved in deciding how something is done

http://en.wikipedia.org/wiki/New_media

Traditional vs. New Media

- The dividing line is the introduction of the computer and modern communications technology

- Note that there is an overlap between traditional and new media, example: special effects are used in films

Producer - Media - Consumer

In terms of a picture we have:

Media

| Producer | | Consumer |

Who is the Producer?

- In the case of a book there is typically a single producer, the author

- In the case of a film there could be hundreds of people involved in its production

- In all cases the group producing is (much) smaller than the group consuming the media

- This is one of the important characteristics of media

Who is the Consumer?

- The consumer group could number in the millions, particularly in the case of a book or film

- A book is consumed individually and at an individual pace

- Film and TV are largely group viewing, they occur at a fixed point in time and are viewed at the same rate

- For film the group viewing may be part of the experience, eg: Rocky Horror Picture Show

Media Artifacts = $

- The media is where the action is

- In the case of a book, it is the book that is bought and sold, this is where the money is made

- Shifts in the way media is produced or sold can have a major impact on the media industry
  - Netflix
  - Others?

- It can produce new types of media and kill existing ones
  - Are paper newspapers or books going to die in the near future?

Media Processes

What is involved with media?

◦ Production process

◦ Manufacturing

◦ Distribution

◦ Sales

◦ Advertising and marketing

◦ Business models

◦ Artists

Example

- To see how technology can impact a media consider the music industry

- The music industry is tightly controlled by a small number of companies

- In the past there have been three main players in this industry:
  - Record companies
  - Radio stations
  - Musicians

Music Industry

Traditional business model:

◦ Record companies make their money from selling recordings, in the past records and now CDs

◦ Radio stations make their money from advertising, they play music, people listen and then they can sell advertising time

◦ Musicians make their money from concerts, ticket sales are their income

Music Industry

- Most musicians make nothing from recordings, only the very top sellers make money

- The royalty on a CD is around $0.25, but this is only paid after all the production costs are covered, this includes marketing and advertising

- The recording companies and record stores make all of the money

- Note: song writers do make royalties off of each CD sold, without deductions

Music Industry

- Why do (did?) people buy CDs?

- Traditionally they hear the music on the radio, they like a song and then buy the CD

- Record companies want play time for their artists to increase CD sales

- Radio stations make their money from advertising, so they want to play the hits

- In theory radio stations should pay royalties to song writers and record companies

Music Industry

- Why do musicians make recordings for free?

- Radio play and CD sales increase demand for concerts

- Musicians can play more concerts, charge more for tickets, and make more money

- Basically each group helps the other, but they do not like each other, think the others make too much money from their hard work..

Music Industry

- The *Internet* has changed these arrangements..

- File sharing takes the place of the record companies and record stores, also threatens the role of radio

- Music can be distributed through file sharing, no need to buy a CD, just download the songs you want

Music Industry

What are the implications for the business models?

◦ For musicians it does not matter, as long as people hear their music and buy concert tickets its okay

◦ So far record companies have been the losers, mainly through stupidity and an inability to adapt to new technology

In theory the Internet should have helped the record companies, but they were too slow to take advantage of it

Music Industry

- The Internet would have eliminated manufacturing, stocking and distribution costs, downloads essentially cost nothing

- Download cost could be significantly less than a CD, and more convenient

- If they had moved quickly, free downloads would not be near the problem they are now

- But do free downloads really hurt the record companies?

Music Industry

- There is no clear answer to this question

- There is some evidence that free downloads increase CD sales

- They play the same role as radio play

- You could record songs for free off the radio, so you could get them for free that way

- A convenient and reasonably priced service (iTunes??) could eliminate most piracy

Music Industry

- Does this mean that radio is the real loser??

- Radio listening is down, but the increase in media availability has decreased the time each media form commands, TV viewing is down as well

- Musicians could produce their own recordings, distribute them through their web sites and cut both the record companies and radio stations out of the loop

- But how would we find the web sites that we like? How would we find new music?

Music Industry

- Its not clear how all of this will work out in the long term

- Recording companies are slowly moving onto the Internet

- Radio is going to subscription, like cable TV, through satellite radio, so they do not need to worry about advertising any more

- The way we listen to music is changing, but its not clear who the winners will be

Do *social media* fit our definition of mass communication?

How technology affected other media?

Your Action Items

Read chapter 1 and 2 of course text

Summary

We:

- Introduced the scope of this course
- Discussed the class structure
- Outlined course policies
- Introduced *media*

Next Class

The work of Marshall McLuhan

Introduction to responsive media