

American Cultural Studies: Digital networks and literacies

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1 Introduction: to course and to site - a technological interface to cultural knowledge

Introduction to WEF 21st century skills, the increasing role of technology in shaping not just how we do but understand things. Important points about the site:

- The site deliberately presents slow UX and UI (user design and interface)
- The site was designed for the course
- A note about licenses. Creative Commons. Declarations of academic integrity

- The home page (which can always be returned to by clicking on the site title and icon) is where you can find the link to the syllabus page, important announcements, and site how-tos, including links to sample posts, by category
- The syllabus page contains the link to the forum, which will be used for informal conversation and questions about the course material
- Categories are always visible in two columns at the top of the site pages
- The categories are:
 1. Today I Learned: Today I Learned pages are where you recapitulate course material, explaining what was novel about it. These posts can also explore how what you learned relates to what you already knew;
 2. Tweets and Memes: Tweets and memes are very brief posts. They either highlight key ideas and quotations or display visual memes you make illustrating ideas or questions from the week's material. You can make a meme by using the free software image editor GIMP and uploading them to wikimedia commons – following these instructions on how to publish images to posts. Content posted to this category should indicate in their title whether they are tips or memes;
 3. Research/Reflection Notebook: Research/reflection notebook pages contain study notes, reading notes, relevant links; these pages also demonstrate your understanding of subjects, analysis – by performing detailed examination of anything complex to understand its nature or determine its essential facts, and judgement of worth. This pertains to questions of what constitutes more/less valuable information/knowledge and what constitutes meaning. These can be longer posts;
 4. Quiz/Questions: Quiz/Questions pages pose questions you have about the material that you would like to know more about. You can also set each other quizzes to help each other master the material;
 5. Groups: Groups pages provide a brief introduction to the members of your group: your hobbies, interests, what kind of tasks you envision you will take on in your group – anything you would like to share to make the online classroom more personal. Group members should identify themselves with their initials. This is a mandatory post;
 6. Rapid Response Collecting: Rapid response collecting pages are where you share links to artifacts that show how we live, what design can do, and representative of certain types of knowledge, while articulating example counter-narratives. **The purpose of your research is to map out the knowledge and design of the digital environment - seeking an artifact and its larger context. The final project will present how the artifact is being used to manage complex situations. It will assess which resources are available; which social environments they emerge from (e.g. what profile of work colleagues, classmates...); what the parameters of the task they are solving are; what their interfaces are; what kind of communications system they**

need for continued operability, and which procedures and tools are used in given situations (cf. Burger 1972 in Goetz 2020). You will use metadata – data about the artifact – to ensure the artifact is communicative. You can read more about rapid response collecting on the V&A page explaining the origin of this practice. These are longer posts;

7. Aggregations: Aggregations pages are where you collect a variety of links – from site posts written by your or other groups to forum posts to any other links on the Internet that are relevant to a topic that is explained. If the links are external, they must be credible. See this handout for more information;
 8. Glossary: The glossary page is where you list vocabulary that you learned from the reading, with definitions. Note the vocabulary quota/semester listed in the syllabus. These are short posts;
 9. Action Cards: Action cards record tasks completed as part of the intercultural collaboration in the second semester, following the sample Action Card;
 10. Intercultural Communication: Intercultural communication pages are related to networked learning, collaborative project-based learning course components and will be used in the second semester. These are longer posts.
1. Course description and mission statement: This course departs from the thesis that cyberspace is the new frontier of the American Dream. Following Prof. Emeritus Heinz Ickstadt's that American be considered "within a network of global and transnational interrelatedness", the course will also have an intercultural component. Its Deweyan goal is to explore the histories, tools, artifacts, and skills relevant to the electronic frontier of the 21st century, requiring new literacies and actionable learning at a time the World Economic Forum has dubbed the 'great reset' (Schwartz & Malleret 2020).

As humankind explores this new "electronic frontier" of knowledge, it must confront again the most profound questions of how to organize itself for the common good. The meaning of freedom, structures of self-government, definition of property, nature of competition, conditions for cooperation, sense of community and nature of progress will each be redefined for the Knowledge Age - just as they were redefined for a new age of industry some 250 years ago. - Dyson et al., A Magna Carta For The Knowledge Age

2. Course ethos: This course, in the tradition of American self-discovery and the maker-mindset, carries forwards the pedagogical questions of 'Where do we come from? What are we? Where are we going' (Gauguin in Trocmé-Fabre) as we care-fully find our way in an increasingly interconnected, uncertain world that is the new electronic frontier.
3. Course objectives: Critically analyze, evaluate, relate, and synthesize the sometimes competing views and expressions of American, global, digital,

and other knowledge cultures and where they intersect; Cultivate digital literacy and 21st century skills; Develop contextual and historical awareness; Demonstrate enough knowledge of the subject matter to raise meaningful questions effectively; Gather and evaluate relevant and credible sources; Engender good intercultural communication skills in various projects and across networks.

2 The historical context of digital tools and the electronic frontier

Brief discussion of STS. Tools as culture.

Class exercise: Skim Dyson et al. Discuss what interests you: make a meme, share what you learned today, chat on the forum, etc.

Required reading:

Dyson, E. et al. (1994). Cyberspace and the American Dream.

Suggested reading:

Lee, T. (2014). 40 Maps That Explain the Internet.

3 How to read a book, manage time, collaborate

Rapid logging, note taking, mind maps, learning strategies. Remembering to note down what you are learning. You can use the site as a shared resource.

Class exercise: explained below. Can be shared on forum or in today I learned, research/reflection notebook, etc.

Required reading:

The Good Project. (n.d.) The Good Collaboration Toolkit. pp. 3 and 4; choose a narrative to read. Answer the questions on p. 3 and share with your group - you are encouraged to update your group page with a synthesis of your replies. Also read the project's Where are you and where do you want to go? and answer the questions.

Suggested reading:

Bodnar, M. (2019). Here is How You Can Reclaim Control of Your Time in as Little as 30 Minutes.

Center for Humane Technology. Human Design Guide.

Matuschak, A. Notes.

Moodjuice. (n.d.) Anxiety: Moodjuice, a self-help guide. Scottish National Health Service.

Pausch, A. (2007). Time Management.

Wozniak, P. (1999). Effective Learning: 20 rules of formulating knowledge.

4 Media and Web literacy

Defined in class, and collectively as a class.

Class exercise: Using Caulfield, choose a Four Moves task (online), and check its accuracy.

Caulfield, M. (2021). Web Literacy For Student Fact-Checkers.

Dobelli, R. (2013). The Art of Thinking Clearly. London: Sceptre Books.

Lipschultz, J. (2018). *Social Media Concepts*. New York: Routledge.
Kellner, D. & Share, J. (2005). *Toward Critical Media Literacy*. *Discourse: Studies in the cultural politics of education* 26(3), pp. 369-86. Excerpt at pp. 374-77. Discussed in class.

5 Mental models, systems theory

Brief introduction to the 'Knowledge Age', cybernetics, systems theory. Comparison to the Republic of Letters. The Mother of All Demos. The American source of the dream of augmented learning.

Individuals who operate effectively in our culture have already been considerably "augmented." – Doug Engelbart

1. People are more important than computers.
2. Much of what we believe about computers is wrong.
3. It is easy to use a computer.
4. This is fortunate, because everybody's going to have to learn.
5. It is not so easy to use a computer wisely.
6. This is unfortunate, because everybody's going to have to learn.
7. Computers can actually be a lot of fun.
8. There are people who want to put a stop to that. - Michael Crichton, *Electronic Life*

Using mental models and systems theory to 'find' something to say about rapid response artifacts. Communicating the electronic frontier. Rhetorical topoi. Complex systems map as one such 'place' to find things to say. How does the boundary object relate to other ways of knowing or histories of knowing?

Preparing to create with digital resources and present rapid response artifacts. How do **you** define digital culture? (Games, dictionaries, chat, YouTube tutorials, etc.) Choose an artifact and relate it to course material (e.g. illustrate its mental model, draw a mind map of where it fits in to other digital artifacts, how does it fit in to digital literacy?)

The purpose of your research is to map out the knowledge and design of the digital environment - seeking an artifact and its meaning in a larger context.

Class exercise: create your own mind map revising and relating key concepts. To share a mind-map, upload it to wikimedia commons and insert image as per the instructions (see site resources).

Bodnar, M. (n.d.). *Mind Mapping*.

Chang, D., Ge, Y., Song, S., Coleman, N., Christensen, J. & Heer, J. (2009). *Visualizing the republic of letters*.

Chua, S. (2013). *Mapping what I'm learning*.

Sayama, H. (2010). *Complex Systems Organizational Map*.

Castellani, B. & Gerrits, L. (2021). *Map of the Complexity Sciences*. Arts and Science Factory, LLC.

Required viewing:

Eames, C & R. (1960). *Introduction To Feedback*.

Or Landow, G. (1992). The Nonlinear Model of the Network, in Hypertext and Critical Theory.

Suggested reading:

Bateson, M. How To Be A Systems Thinker.

Wikipedia. Cognitive Distortion.

Ecoliteracy. Systems Thinking.

De Bono, E. CoRt 1 (also see CoRT2-6).

Jefferson, T. (1814). Letter to Thomas Cooper, 25 August 1854.

Meadows, D. Dancing With Systems.

Meadows, D. Leverage Points.

Parrish, S. Mental Models.

Manoogian, J. (2018). The Cognitive Bias Codex.

Weinberg, G. & McCann, L. (2019). Super Thinking: The big book of mental models. New York: Portfolio Penguin.

University of Illinois. The Cybernetics "Thought Collective".

1. Mindmap tool A diagrams.net instance hosted via chatons Note: it can take a few seconds to load.
2. Free software mindmap tool: This option requires learning a few simple commands, but will introduce you to a digital tool that can expand to almost any use-case you can imagine (from slides, to rss, to email, to TODOs, to focused writing, to coding...)

Emacs offers lots of mind map tools. The simplest to use is `ascii-art-to-unicode.el`. At the bottom of the Emacs splash screen buffer, type `Alt-x` then type `list-packages`. Scroll to `ascii-to-unicode.el`, and install by clicking the 'install' button.

Note: you can copy the instructions that are in the installation buffer that appears in the 'install split screen' by pressing `CTRL+[spacebar]` and pressing the down button, then `Alt+w`. You can paste that wherever you want, like in an emacs `.txt` file. (To open a new file, type `CTRL-x CTRL-f` and the name of the file and its extension (e.g. `.txt`) and when you are ready to save it, type `CTRL-x CTRL-s`). Or, you can just return to them by typing `Alt-x list packages`, and `CTRL+s` to search for the `ascii` package, press enter, and read the instructions again.

If you are using Emacs 27 or 28, that is it! If you are using an earlier version of Emacs, you have to find your initialization file by typing `C-x C-f` and then typing either `.emacs` or `.emacs.d/init.el` after the `~/` prompt at the bottom of the 'splash screen' buffer.

Typing one of those commands will bring you to your `init` (initialization) file (just press the big X if what you open is empty). You will need to include something like this:

```
(require 'package)
```

```
(add-to-list 'ascii-art-to-unicode  
'("ascii-art-to-unicode-el" . "https://www.gnuvola.org/software/aa2u/"))
```

6 Cultivating digital gardens

Computers as gardening tools. Bush's Memex. Learning to assemble epistemic artifacts and make conscientious meaning.

Review of previous readings.

Introduction to rapid response collecting:

Contemporary objects are acquired in response to major moments in recent history that touch the world of design and manufacturing. Many of the objects have been newsworthy either because they *advance what design can do, or because they reveal truths about how we live.* ... each new acquisition raises a different question about globalisation, popular culture, political and social change, demographics, technology, regulation or the law. - VA

... crisis is consumed, projected, and performed (...because it distributes just as it it produces knowledge) - Michelle Cook

Introduction to boundary objects:

A boundary object is (1) an artefact that (2) crosses boundaries, and (3) does so by conveying meaning. Boundary objects are thus artefacts that impact the relationship between people and technology. In this relationship, boundary objects transfer knowledge between different social domains. The transfer takes place by using the object to negotiate meaning and by establishing a shared understanding between the two formerly dispersed domains. - Marheineke, M (2016)

Examples:

Emojis used in Skype are a simple form of visuals that support sharing meaning. Building on common ground, task accomplishment profits from process maps, more complex forms of semantic boundary objects, which facilitate knowledge translation. Lastly, pragmatic boundary objects are found to dominate the social side of virtual collaboration (people and structures). A pragmatic boundary object facilitates rich knowledge transformation with, for example, virtual whiteboards for real-time collaboration. As a consequence of the highly interactive nature of these boundary objects, deeper social ties within the community are established. - Marheineke, M. (2016)

Two tables from Marheineke.

Class exercise: free choice. Make a meme, share what you learned today, tweets and memes, reflection/research notebook etc.

Required reading - explore some of the following and compare with your own experience of where people go to share ideas online; the first is mandatory. **We are adapting the V&A approach to the context of the class.**

<https://www.vam.ac.uk/collections/rapid-response-collecting>

<https://stumblingon.com/>

<https://answers.launchpad.net/>

<https://nojs.club/>

<https://10kbclub.com/>

<https://wiby.me/>
<https://neocities.org/>
<https://special.fish/>
<https://searx.me/>
<https://beakerbrowser.com/>
<https://webring.xxiivv.com/>
<http://theoldnet.com/>
<https://gurlic.com/>

Suggested Reading:

- Acevedo, M. (2007). Network Capital: an Expression of Social Capital in the Network Society. *The Journal of Community Informatica* 3(2).
- Appleton, M. (2020). A Brief History and Ethos of the Digital Garden.
- Bernstein, M. (1998). Hypertext Gardens.
- Bush, V. (1945). *As We May Think*.
- Engelbart, D. (1962). *Augmenting human intellect: A conceptual framework*. Menlo Park: Stanford Research Institute.
- Engelbart, D. (1968). *Demo Interactive*.
- Herzog, W. (2016). *Lo and Behold*.
- Hindmen, M. (2007). *Voice, Equality, and the Internet*. Hindman.
- Licklider, J. C. R., & R. W. Taylor. (1968). The computer as a communication device, *Science and Technology*. Republished in SRC Research Report 61, Digital Equipment Corporation, 1990. (Starts on Page 21 of the PDF).
- Martinus, H. (2020). *My Product Is My Garden*.
- Rheingold, H. (1985). *Tools for thought*.
- Rheingold, H. (2012). *Virtual Community*.
- Turner, F. Where the counterculture met the new economy: the WELL and the origins of virtual community. *Technology and Culture*, 46.3, July 2005, 485-512. with thanks to Howard Rheingold.
- Vallee, J. (1982). *The Network Revolution*. Berkeley: And/Or Press.

7 The electronic frontier as utopia/dystopia

Lots of vocabulary this week, e.g. free software, MAGFA or FAANG, surveillance capitalism, walled gardens, vendor lock-in, interoperability, switching costs, third-party tracking, etc. Students are encouraged to skim all readings for vocabulary.

Class exercise: Choosing and exploring two rapid response artifacts of choice. Can be from last week's list. Being prepared to criticize it in terms of utopia/dystopia. Post thoughts to aggregations (to help you gather relevant resources for your project), quiz/questions, research/reflection notebook, today I learned, tweets and memes...

Suggested reading:

- Bruder, J. & Maharidge, D. (2020). *Surveillance capitalism and the internet of things*.
- Carr, N. (2020). *From context collapse to content collapse*.
- Cyphers, B. and Doctorow, C. *A legislative path to an inoperable internet*.
- Doctorow, C. (2012). *The curious case of internet privacy*.
- Doctorow, C. (2012). *Lockdown: The coming war on general-purpose computing*.

- Hurst, M. (2020) Snapchat and content collapse.
- Hurst, M. (2020). The not so candid cameras.
- Lem, S. Any of his science fiction. Take a look, for example, at his neologisms: via Wikipedia.
- McNamee, R. and Listi, O. (2019). Roger McNamee, Advisor to Mark Zuckerberg, on Facebook's Infancy.
- Peck, S. (2019). Why OPSEC is for everyone, not just for people with something to hide – part II.
- Philip. GPT3 bot posed as a human on AskReddit for a week.
- Skolnick, E. (2020). No way out.
- Stallman, R. (2002). Free software, free society. Boston: GNU Press, Free Software Foundation.
- Vitak, J. The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56, 451-470.
- Wu, T. (2020). The Google case.
- Zuboff, S. (2019). *The age of surveillance capitalism: the fight for a human future at the new frontier of power*. New York: Public Affairs. Reviewed by Carr, N. (2019). Thieves of experience: how Google and Facebook corrupted capitalism.

8 Presenting rapid response artifacts

Taking the virtual tour of our museum.

9 Digital artifacts as complexity management

Brainstorming for constructive narratives in rapid response collecting of artifacts. What problems are people solving online? How are they solving them? How do we find them? How to use the Internet in this context.

Class exercise: guided brainstorming techniques

Understand the purpose of this and the preceding project: **The purpose of your research is to map out the knowledge and design of the digital environment - seeking an artifact and its larger context. The final project will present how the artifact is being used to manage complex situations. It will assess which resources are available; which social environments they emerge from (e.g. what profile of work colleagues, classmates...); what the parameters of the task they are solving are; what their interfaces are; what kind of communications system they need for continued operability; and which procedures and tools are used in given situations (cf. Burger 1972 in Goetz 2020).**

In addition to revision of mind maps, etc., categories from Atkinson, P. et Angeles, London: Sage Publications.

Optional subject:

100 rabbits. 100 rabbits wiki

10 Biases, curation, and algorithms: What to do

Reviewing our rapid response artifacts. Considering bias. Reviewing utopia/dystopia. Thinking about problems needing solving.

Class exercise: make a list of 'do's' in social communication. Can be an aggregation, quiz, research/reflection, today I learned, or tweet and meme.

Key words: echo chamber, epistemic bubble, algorithmic governmentality, Gell Mann

Consider:

199. Can You Teach Indian Food?

It's not easy to find young Anglo kids in Cleveland or Topeka who crave tandoori chicken or shrimp vindaloo. And yet kids with the same DNA in Mumbai eat the stuff every day. It's clearly not about genetics.

Perhaps households in Mumbai approach the issue of food the way school teaches a new topic. First, kids are taught the history of Indian food, then they are instructed to memorize a number of recipes, and then there are tests. At some point, the pedagogy leads to a love of the food. Of course not.

People around the world eat what they eat because of community standards and the way culture is inculcated into what they do. Expectations matter a great deal. When you have no real choice but to grow up doing something or eating something or singing something, then you do it.

If culture is sufficient to establish what we eat, how we speak, and ten thousand other societal norms, why isn't it able to teach us a process to make art? Isn't it possible for the culture to normalize goal setting and passion and curiosity and the ability to persuade?

It can.

And you don't have to wait for it to happen. You can begin now. - Seth Godin, *The Practice* (2020).

Required reading and viewing (constructive response and criticism):

Godin, S. (2021). *Publishers, Curation, and Algorithms*.

Postman, N. (1990). *Informing ourselves to death*. *Open Mind* e1095.

Suggested reading:

Arendt, H. (1972). *Crises of the Republic*. New York: Harourt Brace Jovanovich.

Bonney, G. (2013). *Social Media Do's and Don'ts*.

Ciampaglia, L. & Menczer, F. (2018). *Biases Make People Vulnerable to Misinformation Spread By Social Media*.

Dror, I. (2020). *Cognitive and Human Factors in Expert Decision Making: Six Fallacies and the Eight Sources of Bias*. *Analytical Chemistry* 2020 92 (12), 7998-8004 DOI: 10.1021/acs.analchem.0c00704.

Giridharadas, A. (2020). *We can have democracy or we can have Facebook, but we can't have both*.

Moore, C. & Woodrow, P. (2014). *Mapping Cultures - Strategies for Effective Intercultural Negotiations*.

- Muhammad, H. (2021). The algorithm did it!
- Knuth, D. (1972). Ancient Babylonian Algorithms. *Communications of the ACM* 15 (7), pp. 671-7.
- Markup Staff. (2020). *Algorithms Behaving Badly: 2020 Edition*.
- Muhammad, H. (2021). The algorithm did it!
- Tufecki, Z. (2019). How recommendation algorithms ruin the world.

11 Preparing to present 'complexity artifacts'

Excerpts to help frame final presentations. Review. Remember to include nuance.

Class exercise: make reflective meme about class this semester, or write a reflection notebook post.

In addition to review of mind maps, etc., Atkinson, P. et al. (2007). *Handbook of Ethnography*. Los Angeles, London: Sage Publications.