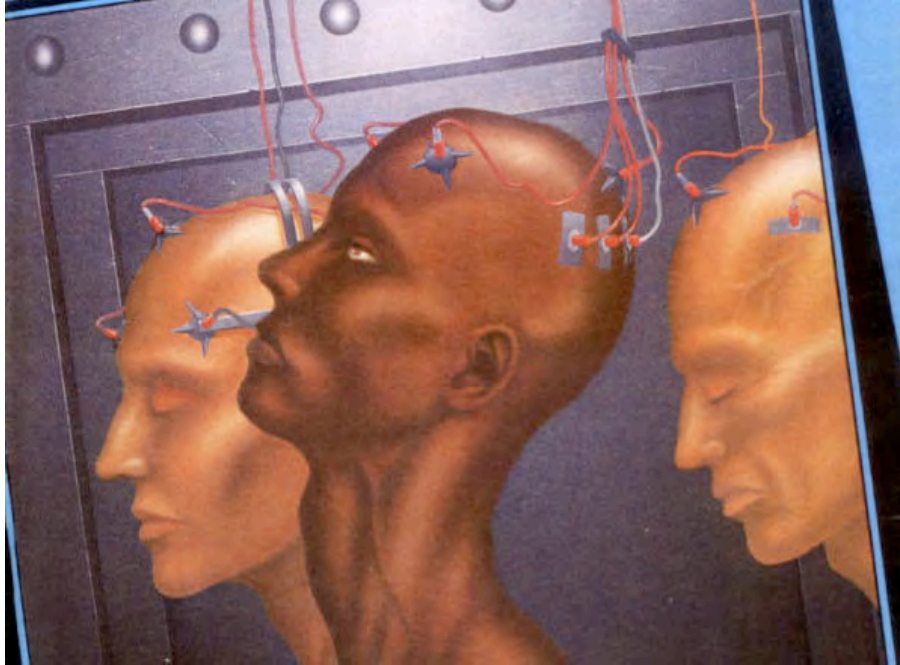


HUMAN-COMPUTER INTERFACE DESIGN MM 3F03



Pre-cogs from Philip Dick's short story The Minority Report.



STUDY WIZARD

FALL 2008

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Faculty of Humanities, McMaster University

Human-Computer Interface Design

Fall 2008, Department of Communication Studies and Multimedia

Lecture Th 9:30 – 11:30 a.m. | Studio Lab TBA | Room TBA

Instructor: Lori Shyba MFA PhD

Office hours: M/Wed 1:00 – 3:00 or by appointment. Location: 304 Togo Salmon Hall.

Email: shybal@mcmaster.ca / Course site: <http://lorishyba.pbwiki.com>

COURSE DESCRIPTION

Explores history and design of human-computer interface, focusing on the relationship between computers and people. Topics include narrative and games, interactive cinema, interface design usability and evaluation; interface and representation; and the future of human-computer interactions.

QUESTIONS AND TOPICS WE CAN EXPLORE:

- Who were the visionaries of computational interactivity, art, and design?
- What are the sites of human-computer interface and how does the distance of experience between humans and computers shape our creative projects?
- What role does improv and ‘play’ have in games and other interactive playspaces? How about narrative?
- How do arts, cognitive science, and computational technology intersect to produce multi-modal media texts? Visual, Physical, Aural, Literary ... Emotional?
- Can this multi-textuality factor into the creative process of new media and game development? How about in reflexive analysis?
- Can we open our process and projects up for a final showcase of work?
- What skills can we apply to our work from computer-science HCI (Human-Computer Interaction) in terms of ergonomics, visualization, and cognitive engineering?
- What does the future hold?

Thank you for taking this class and I look forward to working with you.

RESOURCES:

Required:

- Course reader. MM3F03. Available from Copies Plus, 9 Sterling St., Westdale.
- A notebook for response writings.

Highly Recommended:

- Your own computer and your own colour printer although it is not necessary to bring either to class.

ASSIGNMENTS: Detailed instructions are available on the class wiki. See attached subjects outline for tentative schedule of readings and activities.

1. **Group Presentation** - Groups will sign up to present on and lead class discussion on the coursepack readings. You will be evaluated on the clarity of your presentation (do you bring out the main points of the article in an understandable way?), the quality of your discussion questions, and your efforts to involve the class. Creative presentations will be judged especially favorably. The group’s outline and discussion questions are due before the presentation. See the class wiki for presentation steps and tips.

2. **Interaction Design Project** You may work independently or in small groups. The style and genre of these artistic projects will be determined early in the course and will progress through stages of development and production based upon industry standards. Components of the project will include 1) pitches, t/a charts, and mind maps; 2) sketches and/or storyboards; 3) design and technical documents, and will conclude in 4) working prototypes. Each project will also have and 5) accompanying promotional web site and/or wiki/blog and accompanying print material on a case-by-case basis.

3. **Graphic User Interface (GUI) and Design Architecture Critique.**

GRADING: Your final grade will be based on the following criteria:

20% — Class participation, discussions, and in-class response writings.

20% — Group presentation.

50% — Interaction Design Project.

10% — GUI and Design Architecture Critique.

See http://registrar.mcmaster.ca/calendar/year2003/sec_109.htm for the grading scale.

EVALUATION: Evaluation criteria specific to each project which will be identified as we go along. Given the nature of the artistic process, grading will include subjective assessment.

CLASS POLICIES: Attendance is crucial for succeeding in this course. Only two unexcused absences will be allowed. Positive and consistent class participation is essential. I expect to hear everyone's voice during class discussions and I have no hesitation to cold call for responses. During presentations, you are expected to participate or observe with interest and enthusiasm.

You are responsible for completing all reading assignments, without exception, by the day they are discussed. Be prepared for regular "response writings," five- to ten-minute in-class writing assignments that focus on the readings and studio work. Sometimes these responses will be written at the beginning of class, to evaluate your preparation; sometimes they will be written at the end of class, to gauge your participation.

Assignments must be completed and turned in at the time they are due, or they will be considered late. Assignments drop half a letter grade for each day they are late. Assignments more than three days late will not be accepted unless prior special permission has been granted. Projects will not be accepted late under any circumstances except for documented medical reasons.

Appropriate behaviour in the studio lab is a must. Please focus on classwork during class time. Checking email or working on other course material is not allowed. Web surfing or playing games is likewise not permitted if not related to course material. Unless permitted to do otherwise, during seminars, presentations, and discussions you will be required to turn off your computer's monitor in order to give your full attention to the class proceedings. If you choose to work on your computer during this time, you will be dismissed from class.

ACADEMIC HONESTY: Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at http://www.mcmaster.ca/senate/academic/ac_integrity.htm

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not your own and where credit is not cited.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

Email: It is the policy of the CSMM Department that all email communication between students and instructors (including TAs) must originate from their official McMaster University email accounts. This policy protects the confidentiality and sensitivity of information and confirms the identities of both the student and instructor

Accommodations For Students With Disabilities: If you require special accommodation for learning or have any special needs please let me know of them as soon as possible in order that arrangements can be made. Students with disabilities are encouraged to register with the Centre for Student Development.

Safewalk: For a safe walk any time, call S.W.H.A.T., 527-7070, Ext. 27500.

**Human-Computer Interface Design
MM 3F03 Course Pack Readings, 2008**

THESE READINGS ARE ENTRY POINTS INTO THE DISCUSSION TOPICS.

1. Laurel, Brenda, Rachel Strickland, and Rob Tow. 1994. "Placeholder: Landscape and Narrative in Virtual Environments," ACM SIGGRAPH Computer Graphics archive Volume 28 , Pages: 118 - 126 .
2. Salen, Katie, and Eric Zimmerman. 2004. "Design, Systems, Interactivity." In *Rules of Play: Game Design Fundamentals*. Cambridge: MIT. Pages 29 – 70.
3. McGonnigal, Jane. "Supergaming: Ubiquitous Play." In *Modern Drama*. Fall 2005. Pages 471 – 491.
4. Moggridge, Bill. 2007. Interviews with Bill Atkinson, Paul Bradley, Bill Verplank. In *Designing Interactions*. Cambridge: MIT.
5. Buxton, Bill. 2007. Selections in *Sketching User Experiences*. Amsterdam: Elsevier. Pages 105 – 154.
6. Crawford, Chris. 2005. Interactive Storytelling and Abstraction. In *Chris Crawford on Interactive Storytelling*. Berkeley: New Riders. Pages 45 – 89.
7. Schneiderman, Ben. 2002. "Understanding Human Activities and Relationships." In *Leonardo's Notebook*. Cambridge: MIT. Pages 75 – 109. Pages 75 – 134.
8. Tufte, Edward. 2006. "The Fundamental Principles of Analytical Design." In *Beautiful Evidence*. Cheshire: Graphics Press. Pages 122 – 139.
9. Murray, Janet. 2001. "Agency." In *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: Simon and Shuster. Pages 126 – 153.
10. Nielsen, Jacob. Usability Engineering and Heuristics. See www.useit.com.
11. Gomoll, Kathleen and Anne Nicol. 1990. "Discussion of guidelines for user observation." In *User Observation: Guidelines for Apple Developers*.
12. Pepperell, Robert. "Posthumans and Extended Experience." In *Journal of Evolution and Technology*. Vol 14 – April 2005.

SUBJECT OUTLINE Human Computer Interface Design

Date	Topics Summary Red indicates graded tasks	Readings for the Week	Activities
Wk 0	INTRODUCTION and course expectations (draft). Overview of Assignments.	(C) Coursepack: Available Copies Plus (See Coursepack for full citations.) (W) Available on class wiki	NB: Activities are Subject to Change
Wk 1 8-Sep	Sites of Human-Computer Interface. Distance of Experience. Virtual Reality Immersion and Drama Process. Time/Action project planning. Assignment of Group Presentations.	(C) Laurel, Strickland, Tow. (W) Shyba, L. (Placeholder paper)	<i>Studio Session</i> Demo: Lori's work.
Wk 2 15-Sep	Group Presentation Distance of Experience Screen based interaction, Video Games. Group Presentation Sketches and Experiential Design. Assignment of Group Projects	(C) Salen and Zimmerman. (C) Buxton (W) See wiki for additional readings.	<i>Studio session</i> Demo: Pitches, TA Charts, Mindmaps.
Wk 3 22-Sep	Group Presentation Distance of Experience Collective Interactivity Alternate Reality Games Group Presentation Influential Pioneers of Interaction Design	C) McGonnigal. (C) Moggridge (W) See wiki for additional readings.	<i>Studio session</i> Work on Project 2 pt 1.
Wk 4 29-Sep	Pitch Sessions And Discussion		<i>Studio session</i> Work on Project 2 pt 1.
Wk 5 6-Oct	ASSG DUE Project 2, pt1. Group Presentation Interactive Storytelling Group Presentation The Human Factor in HCI	(C) Crawford (C) Schneiderman (W) See wiki for additional readings.	<i>Studio session</i> Work on Project 2 pt 2. Sketches and Storyboards
Wk 6 13-Oct	ASSG DUE Project 2, pt2. Group Presentation Analytical Design Assignment of GUI and Design Architecture Critique	(C) Tufte (W) See wiki for additional readings.	<i>Studio session</i> Work on Project 2 pt3. Design and Technical Documents.

Wk 7 20- Oct	ASSG DUE Project 2, pt3. Group Presentation Narrative and Interactive Cinema	(C) Murray, Janet. "Agency." From <i>Hamlet on the Holodeck</i> (W) Mateas and Stern. "Structuring Content in the <i>Façade</i> Interactive Drama Architecture." Pdf	<i>Studio session</i> Work on Project Prototypes
Wk 8 27- Oct	Group Presentation Usability Engineering	(C) Nielsen	<i>Studio session</i> Work on Project Prototypes Internet site and Packaging/Posters
Wk 9 3-Nov	ASSG 3 DUE Group Presentation User Observation	(c) Gomoll and Nicol	<i>Studio session</i> Project Prototypes Internet site and Packaging/Posters
Wk 10 10- Nov	PROTOTYPES DUE Project 2, pt4. Presentations and Critique		<i>Studio session</i> User Testing
Wk 11 17- Nov	Group Presentation The Future of Human and Computer Interactions	(C) Pepperell	<i>Studio session</i> Complete the Prototypes, Internet sites, Packaging/Posters
Wk 12 1-Dec	PROTOTYPES DUE Project 2, pt5. Final Showcase Setup.		Showcase (during this week)