

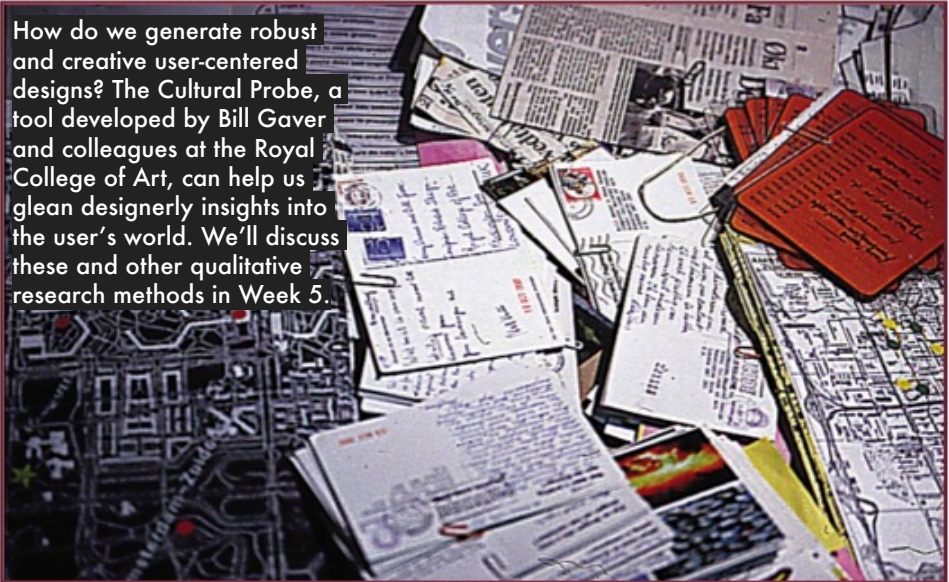
SOC/COS 409

CRITICAL
APPROACHES
TO
HUMAN-
COMPUTER
INTERACTION

TUESDAYS

1:30 - 4:20

FRIEND CTR 203



How do we generate robust and creative user-centered designs? The Cultural Probe, a tool developed by Bill Gaver and colleagues at the Royal College of Art, can help us glean designerly insights into the user's world. We'll discuss these and other qualitative research methods in Week 5.

How do people use contemporary technologies – like cell phones, MMORPGs, text messages, and social network sites – in their daily lives? What impact do these systems have on relationships, mobility, global systems, activism, sustainability and art? And can we design new systems to support these experiences? This senior seminar will bring together students in the social and computing sciences in an introduction to qualitative studies in Human Computer Interaction (HCI), to examine our assumptions in computing systems and reach for new dimensions of user experience.

Critical Approaches to Human-Computer Interaction

As computers have moved off our desktops and into our homes, our cities and our pockets, social scientists and computer scientists are confronting newer questions than just, "does it work?" Instead, researchers and designers face questions about the complex interfaces between the values of social and technological systems, and how they intersect and collide. Such questions demand creative and interdisciplinary approaches to new problems, and are inspiring new solutions too. Addressing this issue, this senior level seminar will introduce you to contemporary *qualitative studies* in Human Computer Interaction (HCI): in particular, the "critical computing" perspective.

This is a small, dynamic, senior level seminar that will expand your understanding of computing systems in our modern world. You will read about up-to-the-minute research in this area that combines computer science, sociology, anthropology, engineering and new media art. We will bring together diverse fields like sociology, computer science, anthropology, and the humanities. We will participate in using, experimenting with and building systems related to this work. You will also work together to creatively design, implement and evaluate a project yourselves. If you are thoughtful and creative and interested in exploring the relationships between computing and social behavior, this is the class for you.



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Course Description	1
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Admission is by application only. Course enrollment limited to 12 students.

50-60 pages of reading per week, plus lab and creative component.

Prerequisites in Computer Science, Sociology, Anthropology, or History.

Credit granted towards Information Technology and Society Certificate.

Participation: Quality over quantity.

In discussion seminars, monopolizing the conversation or intervening with off-the-cuff remarks or digressions is not a goal. Rather, we expect students to prepare assignments in advance – reading, underlining, formulating questions and comments. In class we value the ability to encourage the opinions of others and advance the conversation. Characteristics of specific grading ranges are:

A. Students come to each class with questions/comments based on careful reading and thinking about the assignments; have grappled with the material and assumed some responsibility for it; encourage others to formulate their ideas; listen attentively and forward or debate the comments of predecessors with the goal of elucidating and going deeper into the material.

B. Students are present but their comments do not reflect a serious prior engagement with the texts; they may speak merely to be heard or wait for others to ask interesting questions and then react. They listen to other students, but they do not make an effort to integrate others' views into ongoing discussion. They express opinions as opposed to articulating ideas.

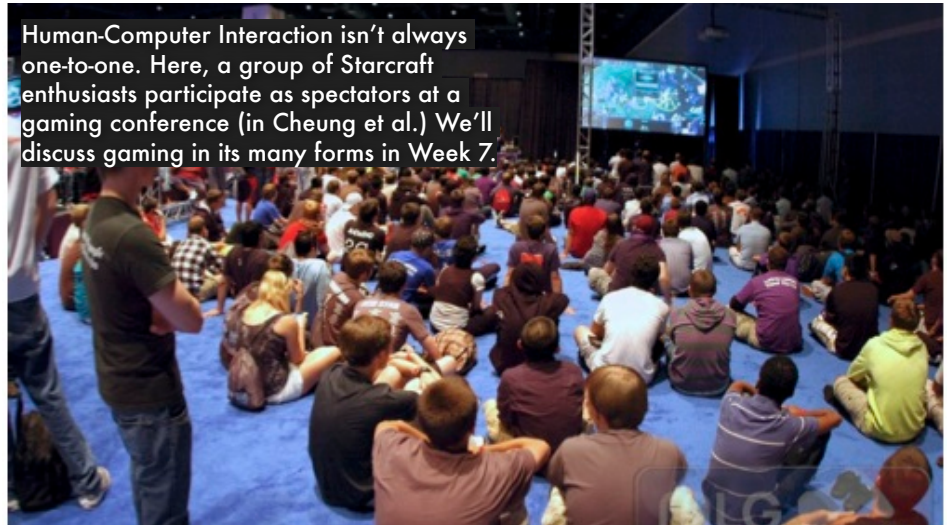
C. Students attend class regularly but their engagement is perfunctory or irrelevant; contributions may be sporadic or digressive and not informed by careful preparation. They may hammer positions or, conversely, fail to realize which issues are at stake.

D-F. Students miss class; are not prepared. (*From: Council of the Humanities Grading Guidelines*)

Ask yourself:

Are you listening to your instructor?
Are you listening to your peers? Are you listening actively? Are you asking questions of your peers? Are you respecting what they have to say? Do you respond respectfully and thoughtfully to their comments? Do you prepare questions or thoughts to share in class based on your readings? Are you asking questions about material you don't understand? Are you drawing connections to other course material? Do you come to class well-rested, fed, and leaving distractions at the door? Do you give your full attention to what is going on?

Human-Computer Interaction isn't always one-to-one. Here, a group of Starcraft enthusiasts participate as spectators at a gaming conference (in Cheung et al.) We'll discuss gaming in its many forms in Week 7.



What is Human-Computer Interaction?

HCI is an interdisciplinary field, bringing together a range of resources to help understand how people interact with computers, project how they ought to interact with computers, and then to build computational artifacts to reflect this knowledge. This means that a variety of methods are available to HCI researchers to explore human-machine interactions.

In this course, we will read and talk about computers, users and systems in many contemporary contexts, such as virtual worlds, mobile devices, urban games, new media art, sustainability, and technology adoption in developing nations. We will also learn qualitative techniques like ethnography, user studies, and ethnomethodology, especially as they are used in the analysis, design, and evaluation of human-computer interactions. These tools and techniques come from a range of fields and we will remain attuned to how they are imported, adopted, adapted and used.

In particular, we will learn about a new strain of research, sometimes called **critical computing**, that tries to question underlying assumptions in computer systems and reaches for new definitions of user experience. Its researchers find inspiration in critical theory, the humanities, critical thinking, anthropology and qualitative sociology, and arts-based practices. As research and design go hand in hand in HCI, in this course we will explore how these qualitative methods can both explore how technology is used in everyday life, and produce novel design possibilities and spaces for computation.

An Interdisciplinary Classroom

HCI is an interdisciplinary field, so this will be an interdisciplinary course. For example, the tools of sociology and anthropology are important for understanding how people actually use computers. But as a domain of computer science, HCI uses these social tools and techniques to imagine, design, implement and evaluate computational systems.

Look around you: your peers in this class come from other parts of the university. Some are computer scientists, others are sociologist, and others are both or neither. We are all here because we have an interest in contemporary computing, in possibilities for research, design and understanding. To be successful as a group, we will have to listen hard to each other, ask good questions, and trust each other's points of view. We can and we will disagree, but we can do so constructively. We can and we will make this disciplinary diversity our strength.

NOTA BENE: This is not a lecture course, so there will be no notes online if you miss a week. Participation is central and essential to your and your classmates' learning. We will not deal with the psychology of humans and machines, nor offer guidelines on how to make pretty widgets or buttons. Nor will this course help you to approach The Singularity or try out a pet project. If this is a problem for you, see the instructor.

grades

You will be evaluated based on our activities in class and beyond related to the course. Readings on current topics in critical HCI will get you thinking and talking about important new ideas. Lab activities will get your hands dirty and get you out into the world as an HCI researcher. We will work together as a class to design, build, and evaluate a design project as your final contribution to the course.

read

10%

Attend and participate! We will read approx. 5 academic papers per week of cutting-edge research. Come to class with readings done and ready to discuss.

15%

Short responses to AT LEAST EIGHT of the reading weeks. Include a brief summary with thoughts and comments about at least one of the papers, and engage your fellow classmates in discussion about the papers and their implications. Due as postings on Blackboard BEFORE NOON on Tuesday.

explore

15%

A take-home midterm exam on course concepts. Due in class after the midterm break.

15%

Four lab reports based on in-class activities that will get you out in the field, get your hands dirty with qualitative fieldwork, think creatively through new designs, or experience systems we read about. Due to instructor by 5PM FRIDAY.

design

25%

A class research and design project will stand in lieu of a final exam. We will discuss and make time for this work during class time as the semester progresses.

20%

A short final paper about your experiences and contribution to the class project.

Attendance & Participation

This is a seminar course: completion of readings prior to class, seminar attendance and participation are *mandatory and graded*. You are expected to come to class, having completed the reading and/or writing assignments due that day.

If you have to miss a class, you must contact me beforehand with a valid excuse. After two unexcused absences, every further class you miss will subtract a third of a letter (i.e. A-, B+, B...) from your final grade.

In-Class Computing

Bring your computers, iPads, phones, or any other devices you wish to class. All readings will be available electronically and we will host active discussion on Blackboard and through a class-designated backchannel.

Portable recorders and cameras will come in handy for fieldwork during the lab sessions too, but please do not record your peers in class.

Please be respectful of your professor and your classmates by not engaging in outside-class activities on your devices. No text messages, Twitter feeds, Facebook browsing, chatting or general web work that is *not* directly related to class.

Working with sources

Academia is all about using sources: reading them, talking about them, critiquing them or exploring them. But *plagiarism*, or passing off someone else's work or ideas as your own without crediting them properly, is unacceptable. *All sources – electronic and paper – must be referenced with the appropriate formatting.* Whether you choose MLA, Chicago style, APA or typical formats in the sciences, please make sure you are consistent! Please note that I will consider your choice of sources in your paper towards your grade, so use your judgment wisely. Plagiarized assignments will result in a grade of zero, and will be subject to University policies on academic integrity. If you have any questions about what constitutes plagiarism, please do not hesitate to contact me.

On-line Sources

The internet is not, wholesale, an academic source. Certainly, many academic sources can be found online, such as electronic versions of books, newspapers, academic journals, and conference proceedings. But personal, commercial, or organizational websites are not appropriate to use as sources in your college career. If you have any doubts as to whether or not a website constitutes a reliable source, send me an email with the URL and I will check it out for you as soon as I possibly can. In general, however, anything you access on <http://portal.acm.org> you should consider an academic source.

Week 1

Values in System Design

Batya Friedman. 1996. Value-sensitive design. *interactions* 3, 6 (December 1996), 16-23.

Cory Knobel and Geoffrey Bowker. 2011. Values in design. *Communications of the ACM* 54, 7 (July 2011), 26-28.

Phoebe Sengers, Joseph Kaye, Kirsten Boehner, Jeremiah Fairbank, Geri Gay, Yevgeniy Medynskiy, and Susan Wyche. 2004. Culturally Embedded Computing. *IEEE Pervasive Computing* 3, 1 (January 2004), 14-21.

Joseph 'Jofish' Kaye. 2006. I just clicked to say I love you: rich evaluations of minimal communication. In *CHI '06 extended abstracts on Human factors in computing systems* (CHI EA '06). ACM, New York, NY, USA, 363-368.

Sally Wyatt. 2003. Non-Users Also Matter: The Construction of Users and Non-Users of the Internet. In: Pinch and Oudshoorn, Eds., *How Users Matter*. Cambridge, MA: MIT Press, 67-80.

Week 2

Putting the "Social" in Social Network Sites

danah boyd. 2009. Implications of user choice: the cultural logic of "MySpace or Facebook?". *interactions* 16, 6 (November 2009), 33-36.

Louise Barkhuus and Juliana Tashiro. 2010. Student socialization in the age of Facebook. In *Proceedings of the 28th international conference on Human factors in computing systems* (CHI '10). ACM, New York, NY, USA, 133-142.

Jeff Hancock, Jeremy Birnholtz, Natalya Bazarova, Jamie Guillory, Josh Perlin, and Barrett Amos. 2009. Butler lies: awareness, deception and design. In *Proceedings of the 27th international conference on Human factors in computing systems* (CHI '09). ACM, New York, NY, USA, 517-526.

Meredith M. Skeels and Jonathan Grudin. 2009. When social networks cross boundaries: a case study of workplace use of facebook and linkedin. In *Proceedings of the ACM 2009 international conference on Supporting group work* (GROUP '09). ACM, New York, NY, USA, 95-104.

Kate Starbird and Leysia Palen. 2011. "Voluntweeters": self-organizing by digital volunteers in times of crisis. In *Proceedings of the 2011 annual conference on Human factors in computing systems* (CHI '11). ACM, New York, NY, USA, 1071-1080.

Week 3

Computing in the Home

Ryan Aipperspach, Ben Hooker, and Allison Woodruff. 2009. The heterogeneous home. *interactions* 16, 1 (January 2009), 35-38.

Genevieve Bell, Mark Blythe, and Phoebe Sengers. 2005. Making by making strange: Defamiliarization and the design of domestic technologies. *ACM Trans. Comput.-Hum. Interact.* 12, 2 (June 2005), 149-173.

Morgan G. Ames, Janet Go, Joseph 'Jofish' Kaye, and Mirjana Spasojevic. 2011. Understanding technology choices and values through social class. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work* (CSCW '11). ACM, New York, NY, USA, 55-64.

Tawanna Dillahunt, Jennifer Mankoff, and Eric Paulos. 2010. Understanding conflict between landlords and tenants: implications for energy sensing and feedback. In *Proceedings of the 12th ACM international conference on Ubiquitous computing* (Ubicomp '10). ACM, New York, NY, USA, 149-158.

Hilary Hutchinson, Wendy Mackay, Bo Westerlund, Benjamin B. Bederson, Allison Druin, Catherine Plaisant, Michel Beaudouin-Lafon, Stephane Conversy, Helen Evans, Heiko Hansen, Nicolas Roussel, and Bjorn Eiderback. 2003. Technology probes: inspiring design for and with families. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (CHI '03). ACM, New York, NY, USA, 17-24.

Laurel Swan, Alex Taylor, and Richard Harper. 2008. Making Space for Clutter and Other Ideas of Home. *ACM Transactions of Computer-Human Interaction* 15.2, Article 9 (July 2008), 24 pages.

Week 4

Mobility and Ubiquitous Computing

Paul Dourish. 2006. Re-space-ing place: "place" and "space" ten years on. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work (CSCW '06)*. ACM, New York, NY, USA, 299-308.

Barry Brown and Mark Perry. 2002. Of maps and guidebooks: designing geographical technologies. In *Proceedings of the 4th conference on Designing interactive systems: processes, practices, methods, and techniques (DIS '02)*. ACM, New York, NY, USA, 246-254.

Louise Barkhuus et al. 2008. From awareness to repartee: sharing location within social groups. In *Proceeding of the twenty-sixth annual SIGCHI conference on Human factors in computing systems (CHI '08)*. ACM, New York, NY, USA, 497-506.

Gilly Leshed et al. 2008. In-car GPS navigation: engagement with and disengagement from the environment. In *Proceeding of the twenty-sixth annual SIGCHI conference on Human factors in computing systems (CHI '08)*. ACM, New York, NY, USA, 1675-1684.

Janne Lindqvist, Justin Cranshaw, Jason Wiese, Jason Hong, and John Zimmerman. 2011. I'm the mayor of my house: examining why people use foursquare - a social-driven location sharing application. In *Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 2409-2418.

Week 5

Doing Qualitative Fieldwork in HCI

Bill Gaver, Tony Dunne, and Elena Pacenti. 1999. Design: Cultural probes. *interactions* 6, 1 (January 1999), 21-29.

Barry Brown, "Seeing Ethnographically". In: L. Bannon, I. Wagner, C. Gutwin, R. Harper, and K. Schmidt (eds.). *ECSCW'07: Proceedings of the Tenth European Conference on Computer Supported Cooperative Work*, 411-430.

William W. Gaver, Jacob Beaver, and Steve Benford. 2003. Ambiguity as a resource for design. In *Proceedings of the SIGCHI conference on Human factors in computing systems (CHI '03)*. ACM, New York, NY, USA, 233-240.

Jina Huh and Mark Steven Ackerman. 2009. Designing for all users: including the odd users. In *Proceedings of the 27th international conference extended abstracts on Human factors in computing systems (CHI EA '09)*. ACM, New York, NY, USA, 2449-2458.

Paul Dourish. 2006. Implications for design. In *Proceedings of the SIGCHI conference on Human Factors in computing systems (CHI '06)*, Rebecca Grinter, Thomas Rodden, Paul Aoki, Ed Cutrell, Robin Jeffries, and Gary Olson (Eds.). ACM, New York, NY, USA, 541-550.

Phoebe Sengers, Kirsten Boehner, Shay David, and Joseph 'Jofish' Kaye. 2005. Reflective design. In *Proceedings of the 4th decennial conference on Critical computing: between sense and sensibility (CC '05)*, Olav W. Bertelsen, Niels Olof Bouvin, Peter G. Krogh, and Morten Kyng (Eds.). ACM, New York, NY, USA, 49-58.

Eric P.S. Baumer and M. Six Silberman. 2011. When the implication is not to design (technology). In *Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 2271-2274.

Week 6

Activism, Hacktivism, and Art

Anthony Dunne and Fiona Raby, "Section 03: Design Noir," "Section 04: Designer as Author" and "Placebo Project" description. *Design Noir: the Secret Life of Electronic Objects*. 44-79.

Daniela Rosner and Jonathan Bean. 2009. Learning from IKEA hacking: i'm not one to decoupage a tabletop and call it a day.. In *Proceedings of the 27th international conference on Human factors in computing systems (CHI '09)*. ACM, New York, NY, USA, 419-422.

Lucian Leahu, Jennifer Thom-Santelli, Claudia Pederson, and Phoebe Sengers. 2008. Taming the Situationist beast. In *Proceedings of the 7th ACM conference on Designing interactive systems (DIS '08)*. ACM, New York, NY, USA, 203-211.

Tad Hirsch. 2009. Communities real and imagined: designing a communication system for Zimbabwean activists. In *Proceedings of the fourth international conference on Communities and technologies (C&T '09)*. ACM, New York, NY, USA, 71-76.

Marc Böhlen and Michael Mateas, "[Office Plant #1: Intimate space and contemplative entertainment.](#)" *Leonardo: Journal of the International Society for Arts, Sciences and Technology*, vol 31, number 5, 1998, pages 345-348. Laurel Swan, Alex Taylor, and Richard Harper. 2008. Making Space for Clutter and Other Ideas of Home. *ACM Transactions of Computer-Human Interaction* 15.2, Article 9 (July 2008), 24 pages.

Week 7

Games and Play

* take-home
midterm due

Gifford Cheung and Jeff Huang. 2011. Starcraft from the stands: understanding the game spectator. In *Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 763-772.

Yusuf Pisan. 2007. My guild, my people: role of guilds in massively multiplayer online games. In *Proceedings of the 4th Australasian conference on Interactive entertainment (IE '07)*. RMIT University, Melbourne, Australia, Australia, , Article 20, 5 pages.

Marek Bell, Matthew Chalmers, Louise Barkhuus, Malcolm Hall, Scott Sherwood, Paul Tennent, Barry Brown, Duncan Rowland, Steve Benford, Mauricio Capra, and Alastair Hampshire. 2006. Interweaving mobile games with everyday life. In *Proceedings of the SIGCHI conference on Human Factors in computing systems (CHI '06)*, Rebecca Grinter, Thomas Rodden, Paul Aoki, Ed Cutrell, Robin Jeffries, and Gary Olson (Eds.). ACM, New York, NY, USA, 417-426.

William W. Gaver, John Bowers, Andrew Boucher, Hans Gellerson, Sarah Pennington, Albrecht Schmidt, Anthony Steed, Nicholas Villars, and Brendan Walker. 2004. The drift table: designing for ludic engagement. In *CHI '04 extended abstracts on Human factors in computing systems (CHI EA '04)*. ACM, New York, NY, USA, 885-900.

Ben deVane and Kurt Squire. 2008. The Meaning of Race and Violence in Grand Theft Auto: San Andreas. *Games and Culture* 3, 264-285.

Week 8

Cities and Crowds

Eric Paulos and Tom Jenkins. 2005. Urban probes: encountering our emerging urban atmospheres. In *Proceedings of the SIGCHI conference on Human factors in computing systems (CHI '05)*. ACM, New York, NY, USA, 341-350.

Steve Benford, Andy Crabtree, Stuart Reeves, Jennifer Sheridan, Alan Dix, Martin Flintham, and Adam Drozd. 2006. The Frame of the Game: Blurring the Boundary between Fiction and Reality in Mobile Experiences. In *Proceedings of the SIGCHI conference on Human Factors in computing systems (CHI '06)*, Rebecca Grinter, Thomas Rodden, Paul Aoki, Ed Cutrell, Robin Jeffries, and Gary Olson (Eds.). ACM, New York, NY, USA, 427-436.

Jenn Thom-Santelli, "Mobile Social Software: Facilitating Serendipity or Encouraging Homogeneity?," *Pervasive Computing, IEEE* , vol.6, no.3, pp.46-51, July-Sept. 2007

Bassoli, A.; Brewer, J.; Martin, K.; Dourish, P.; Mainwaring, S.; , "Underground Aesthetics: Rethinking Urban Computing," *Pervasive Computing, IEEE* , vol.6, no.3, pp.39-45, July-Sept. 2007

Alistair Morrison, Marek Bell, and Matthew Chalmers. 2009. Visualisation of Spectator Activity at Stadium Events. In *Proceedings of the 2009 13th International Conference Information Visualisation (IV '09)*. IEEE Computer Society, Washington, DC, USA, 219-226.

Week 9

Techno-Spirituality

Genevieve Bell 2006. No More SMS For Jesus: Ubicomp, Religion, and Techno-spiritual Practices. *Proc. Ubicomp 2006*. 141-158.

Susan P. Wyche, Kelly E. Caine, Benjamin Davison, Micheal Arteaga, and Rebecca E. Grinter. 2008. Sun dial: exploring techno-spiritual design through a mobile islamic call to prayer application. In *CHI '08 extended abstracts on Human factors in computing systems (CHI EA '08)*. ACM, New York, NY, USA, 3411-3416.

Allison Woodruff, Sally Augustin, and Brooke Foucault. 2007. Sabbath day home automation: "it's like mixing technology and religion". In *Proceedings of the SIGCHI conference on Human factors in computing systems (CHI '07)*. ACM, New York, NY, USA, 527-536.

Jed R. Brubaker and Gillian R. Hayes. 2011. "We will never forget you [online]": an empirical investigation of post-mortem myspace comments. In *Proceedings of the ACM 2011 conference on Computer supported cooperative work (CSCW '11)*. ACM, New York, NY, USA, 123-132.

Susan P. Wyche, Camila M. Magnus, and Rebecca E. Grinter. 2009. Broadening Ubicomp's vision: an exploratory study of charismatic pentecostals and technology use in Brazil. In *Proceedings of the 11th international conference on Ubiquitous computing (Ubicomp '09)*. ACM, New York, NY, USA, 145-154.

Week 10

Gender, the Body, and Intimacy

Genevieve Bell and Paul Dourish. 2007. Back to the shed: gendered visions of technology and domesticity. *Personal Ubiquitous Comput.* 11, 5 (June 2007), 373-381.

Shaowen Bardzell and Jeffrey Bardzell. 2011. Towards a feminist HCI methodology: social science, feminism, and HCI. In *Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 675-684.

Tyler Pace, Shaowen Bardzell, and Jeffrey Bardzell. 2010. The rogue in the lovely black dress: intimacy in world of warcraft. In *Proceedings of the 28th international conference on Human factors in computing systems (CHI '10)*. ACM, New York, NY, USA, 233-242.

Kristina Höök. 2010. Transferring qualities from horseback riding to design. In *Proceedings of the 6th Nordic Conference on Human-Computer Interaction: Extending Boundaries (NordiCHI '10)*. ACM, New York, NY, USA, 226-235.

Joseph 'Jofish' Kaye and Liz Goulding. 2004. Intimate objects. In *Proceedings of the 5th conference on Designing interactive systems: processes, practices, methods, and techniques (DIS '04)*. ACM, New York, NY, USA, 341-344.

Hiroshi Ishii. 1997. *Tangible Bits: Towards Seamless Interfaces between People, Bits, and Atoms*. In *Proceedings of the 15th international conference on Human factors in computing systems (CHI '97)*. ACM, New York, NY, USA. 1-8.

Week 11

Sustainability

Eli Blevins. 2007. Sustainable interaction design: invention & disposal, renewal & reuse. In *Proceedings of the SIGCHI conference on Human factors in computing systems (CHI '07)*. ACM, New York, NY, USA, 503-512.

Carl DiSalvo, Phoebe Sengers, and Hronn Brynjarsdottir. 2010. Mapping the landscape of sustainable HCI. In *Proceedings of the 28th international conference on Human factors in computing systems (CHI '10)*. ACM, New York, NY, USA, 1975-1984.

James Pierce and Eric Paulos. 2011. A phenomenology of human-electricity relations. In *Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 2405-2408.

Tad Hirsch and Ken Anderson. 2010. Cross currents: water scarcity and sustainable CHI. In *Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (CHI EA '10)*. ACM, New York, NY, USA, 2843-2852.

Jon Froehlich, Tawanna Dillahunt, Predrag Klasnja, Jennifer Mankoff, Sunny Consolvo, Beverly Harrison, and James A. Landay. 2009. UbiGreen: investigating a mobile tool for tracking and supporting green transportation habits. In *Proceedings of the 27th international conference on Human factors in computing systems (CHI '09)*. ACM, New York, NY, USA, 1043-1052.

Week 12

Global Systems

Lilly Irani, Janet Vertesi, Paul Dourish, Kavita Philip, and Rebecca E. Grinter. 2010. Postcolonial computing: a lens on design and development. In *Proceedings of the 28th international conference on Human factors in computing systems (CHI '10)*. ACM, New York, NY, USA, 1311-1320.

Elise Oreglia, Ying Liu and Wei Zhao. 2011. Designing for Emerging Rural Users: Experiences from China. In *Proceedings of the 29th international conference on Human factors in computing systems (CHI '11)*. ACM, New York, NY, USA, 1433-1442.

Silvia Lindtner, Bonnie Nardi, Yang Wang, Scott Mainwaring, He Jing, and Wenjing Liang. 2008. A hybrid cultural ecology: world of warcraft in China. In *Proceedings of the 2008 ACM conference on Computer supported cooperative work (CSCW '08)*. ACM, New York, NY, USA, 371-382.

Mark Warschauer, Morgan Ames. Can One Laptop Per Child Save the World's Poor? *Journal of International Affairs*, Vol. 64 No. 1, Fall/Winter 2010.

Jonathan Donner. (2006). The use of mobile phones by microentrepreneurs in Kigali, Rwanda: Changes to social and business networks. *Information Technologies and International Development* 3 (2): 3-19.

May 15

Final Assignments Due

Academic Resources

Conference Publications

Look out for papers published at the following conferences or in these journals, as they represent the work in this field. These papers are all extensively peer-reviewed and "count" as academic work:

- *CHI – Human Factors in Computing Systems*. The flagship conference for all things Human-Computer Interaction.
- *alt.CHI* – A special conference track at CHI aimed at pushing the boundaries of the field and promoting unusual approaches. Peer reviewed and archived.
- *CSCW – Computer Supported Cooperative Work*. Primarily qualitative, ethnographic and microsociological approaches to studying people working together in teams using computers. Usually focused on the workplace, distance, and intercultural communication, although recently expanded to gaming etc.
- *DIS – Designing Interactive Systems*. "The premier, international arena where designers, artists, psychologists, user experience researchers, systems engineers and many more come together to debate and shape the future of interactive systems design and practice." Very interdisciplinary, arts-oriented space.
- *Ubiquitous and Pervasive Computing* – Concentrate on embedding computing technologies and systems into everyday environments. Sensor networks, studies of the home, urban computing, and mixed-media spaces.
- *Mobile HCI*. Looks at mobility in all forms of user experience, especially designing for phones.

Journals

These journals specialize in the relationship between technology and social experience.

- Human-Computer Interaction
- ToCHI: Transactions in Computer-Human Interaction
- interactions: a short magazine-style journal for the CHI community
- Computer-Supported Cooperative Work
- Games and Culture
- New Media and Society
- Science, Technology & Human Values
- Personal and Ubiquitous Computing

Institutional Resources

There is a growing community of HCI researchers and designers across academia and industry. Here is a list of respected labs, companies, and programs that foster this kind of research and system design. Feel free to explore these places online, and click through some of the researchers and projects they have on the go, to get a good idea of HCI work in this domain. Many of their projects are described on their websites and are a great way to get an idea for your user study and design projects.

University Laboratories

- Mobile Life Sweden: <http://www.mobilelifecentre.org/>
- iSchool @ University of Michigan, <http://www.si.umich.edu/>
- DUB @ University of Washington: <http://dub.washington.edu/>
- Cornell University Information Science, <http://www.infosci.cornell.edu/> -

- Cornell's Culturally Embedded Computing (Cemcom): <http://cemcom.infosci.cornell.edu/>
- Human-Centered Computing @ Georgia Tech: <http://www.ic.gatech.edu/research/hcc>
- Informatics Department @ University of California, Irvine: <http://ics.uci.edu> especially the Laboratory for Ubiquitous Computing and Interaction, <http://luci.ics.uci.edu>
- School of Communication and Information @ Rutgers, <http://comminfo.rutgers.edu/> especially Mor Namaan's Social Media Information Lab, <http://sm.rutgers.edu/web/>

Industry Laboratories

- Computer-Supported Cooperative Work Research Group - Microsoft Research, Redmond, WA, <http://research.microsoft.com/en-us/groups/CSCW/>
- Computer Mediated Living Research Group - Microsoft Research, Cambridge, UK, <http://research.microsoft.com/en-us/groups/cml/default.aspx>
- Interaction and Experience at Intel Corporation
- Google User Experience (UX) Group: <http://www.google.com/about/corporate/company/ux.html>
- Xerox PARC <http://www.parc.com/>
- Nokia Research, <http://research.nokia.com/research>

<http://dl.acm.org>

is your most important course resource. All conference and journal papers related to HCI are searchable online here.