Sexual Interactions: Why we should talk about sex in HCI

Johanna Brewer

Donald Bren School of Information & Computer Sciences University of California, Irvine Irvine, CA 92697-2775 johannab at ics.uci.edu

Joseph 'Jofish' Kaye

Information Science Cornell University 301 College Ave Ithaca, NY 14850 jofish at cornell.edu

Amanda Williams

Donald Bren School of Information & Computer Sciences University of California, Irvine Irvine, CA 92697-2775 amandamw at ics.uci.edu

Copyright is held by the author/owner(s).

CHI 2006, April 22–27, 2006, Montreal, Canada.

ACM 1-xxxxxxxxxxxxxxxxxxxx.

Susan Wyche

GVU Center Human-Centered Computing Georgia Institute of Technology Atlanta, GA 30332 spwyche at cc.gatech.edu

Abstract

Within the CHI community there is growing interest in moving beyond cognition and expanding into the social, emotional, and bodily aspects of the human-computer experience. Sex lies at the intersection of these concerns, and indeed outside of HCI, has become a central topic for anthropology, behavioral sciences, and other areas of intellectual inquiry. Examining sex and themes related to it has benefited these disciplines and we intend to understand how it can contribute to HCI.

There is a tendency to desexualize technology, despite the presence of sex and sexuality in a variety of interactions, including the use of the internet for viewing pornography, building online communities, and facilitating intimacy. By rendering these interactions sexless, we risk gaining only a marginal understanding of technology's role in day-to-day life.

Keywords

Human relations, sex, sexuality, pornography, online communities, intimacy

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.



Figure 1: Attachments for a home motor, including vibrator.

Introduction

In The Invisible Computer [13], Don Norman makes an analogy between motors found in early household appliances and computers' growing presence in current everyday technologies, and references a page from a 1918 Sears Roebuck catalog advertising a home engine with various attachments, including a "Portable Vibrator." At the time, vibrators were considered a medical device to treat hysteria by inducing "hysterical paroxysm", or orgasm; today they are widely marketed as sex aids [11]. Norman lists attachments to the home motor: "churn and mixer, fan, buffer and grinder, beater, and sewing machine, among others." He fails to mention the vibrator, in spite of its central presence on the page.

We do not use this example to vilify Norman, but rather to suggest that this approach is typical of HCI's attitude towards sex and themes related to it. It is not that such issues are actively covered up, but rather politely ignored, despite their role in technology use and development. Recent articles suggest that sex-related research can contribute to current HCI discourse. Bell, Blythe & Sengers [1] claim "there is an elephant in the room", and cite pornography in their list of twelve challenges and strategies for design in the home:

"The production and consumption of pornography are some of the most popular and commercially successful applications of digital technology in the world.... While media studies and sociology have turned their attention to this important cultural phenomenon, the Human Computer Interaction community has all but ignored it. It's the elephant in the room at every CHI conference: everyone knows it is there but since nobody wants to talk about it, we pretend that it's not. All of the

usability and (increasingly) enjoyability issues that concern the HCI community apply to pornographic applications as well."

Similarly, Blythe & Jones [3] suggest that design lessons may be learned from successful pornographic sites and asking such questions can contribute to our understanding of wider issues, such as establishment of trust online.

One way of putting this 'elephant' into context is to examine other trends in the field. Accompanying computers' migration away from the desktop came research examining online dating [8], social networks [4], and the design of technology for intimacy [9,18]. These topics are tied together by both sexual and communicative aspects; however they are discussed in ways that render them partially or entirely sexless.

In this workshop, we will discuss the role of sex in HCI, and start with the following claims 1) sex and themes related to it are common and important motivators for technology use and development 2) sex is part of many users' interactions with computers. Our goal is not necessarily to discuss issues of morality, censorship, or the wider questions of sexuality, although we think these matters are important. Rather, we recognize that use of technology to support sexual practices are understudied in the field of HCI, and assert that considering these practices contributes to the growth and development of our discipline.

RESEARCH THEMES

As a way to ground the workshop in this relatively uncharted space in HCI we address three interrelated areas here. Online communities and computer

GOALS OF THE WORKSHOP

This workshop has the following goals:

- To understand how sex and themes related to it can inform current HCI practice and discourse.
- To explore the challenges in conducting human-computer sexual interactions research.
- To brainstorm novel technologies, interactions, and research methods inspired by human sexuality.
- To create a community for future discussion and exploration of the topic.

PROMOTING SAFE AND PRODUCTIVE DISCUSSION

We acknowledge the complexity of sexual topics and will take steps to insure that the workshop is safe and open to a variety of viewpoints. We shall consciously:

- Encourage people to talk and ask questions.
- Maintain a calm non-critical atmosphere for discussion.
- Keep a sense of humor and acknowledge our discomfort with certain topics.

mediated intimacy are areas familiar to the CHI community; pornography is a new one. As sex is a fundamental part of being human we believe studying it will bolster our community's ability to develop human-centered computer devices and applications.

Pornography

Up-to-date figures for pornography on the internet are difficult to find, but a 1998 report suggests online pornographers generated \$1 billion dollars in worldwide revenue in a single year [5]. "Porn" remains one of the most searched for terms on the internet [16]. Historically, pornographers are among the first to develop applications later adopted more generally. Coopersmith writes that pornography drove the transition from Beta to VHS: early VCR buyers were willing to pay more for VHS VCRs in order to watch X-rated films unavailable on Beta. Internet pornographers pioneered pay-per-click banner ads, real-time credit card transactions, and image watermarking [7].

For some, viewing porn is the key reason they own and use a computer [1, 17]. It has and will continue to motivate users to surf the internet and learn new computer skills. Like the VCR, pornography accelerates the adoption of digital communication technologies by putting them into the hands of users that may have no other reason to buy them. The internet, paired with digital cameras, enables not just proliferation, but democratization of the production of sexually explicit material. "Do-it yourself" pornography is a significant and growing segment in the adult entertainment industry [7]. It is therefore difficult to draw a line between pornography distributed through commercial web sites and movies, and communities formed around sharing sexual material.

Sex and Online Communities

With the development of bulletin board systems, usenet groups, MUDS, and MOOS came multi-disciplinary research examining gender identity online[6,17] and community building among sexual minorities [10]. This research demonstrates computers' role in allowing people to behave in ways they feel restricted to do offline and in decreasing the stigma felt by those who engage in non-mainstream sexual behavior.

With increased online participation, growing awareness of unconventional sexual practices and visually richer virtual environments (i.e. Second Life and There.com) a new generation of online communities has emerged, within which a colorful array of fetishistic subcultures has become visible. We believe these computer based groups have the potential to stimulate new questions about online identity, social stigma, and technologies' role in shaping social attitudes.

Intimate Interactions

There is growing interest in developing devices that support computer mediated intimacy. Novel tactile interfaces such as Hug over a Distance [12] and Physical Minimal Intimate Objects [9], among others, begin to respond to our persistent desire to create technologies that simulate touch and body-to-body contact. Examining humans' most intimate interactions would provide insights into developing interfaces that are more affective, pleasurable, fun and human.

Various "teledildonics" patents exist (i.e. US# 5,501,650, US#6,368,268) as well as open-source proposals (http://opendildonics.org/). Commercial products include the Sinulator, an apparatus designed to control a partner's sex toy via the internet. While the

PLAN FOR THE WORKSHOP

9:00-9:30: Welcome, introductions, objectives, schedule. 9:30 -12:00: 10-minute presentations of position papers. 10:15-10:30: Coffee break 12:00-12:30: Divide into breakout groups, selected to include participants from different backgrounds and locations. Plan group approach for afternoon. 12:30-14:00: Group lunch. 14:00-16:00: Breakout sessions. Participants will be asked to elaborate on how HCI can benefit from examining sex and themes related to it. Discussion themes will include:

- 1) concepts for new technologies
- 2) how to research human computer sexual interactions
- 3) implications for existing design areas.

16:00-16:15: Coffee break 16:00-17:30: Presentations of group work. Create poster for conference.

Sinulator web site (http://www.sinulator.com) invites visitors to "join a community" of sinulator users, it is also marketed towards couples to support sex and intimacy even at a distance.

WHAT DOES THIS ADD TO HCI DISCOURSE?

Talking about sex and themes related to it brings new perspectives to existing work, legitimizes other directions of inquiry and has the potential to inspire novel interfaces. In addition to the aforementioned areas, we speculate human computer sexual interactions research can enrich game development, entertainment applications, assistive technologies and others areas we hope to uncover in the workshop.

Acknowledgements

We thank Paul Dourish, Beki Grinter, Phoebe Sengers, Mark Blythe, Genevieve Bell, Ken Anderson, and many others for their advice and support. Thanks also to the workshop chairs and our anonymous reviewers.

References

- Bell, G., Blythe, M., and Sengers, P. Making by Making Strange: Defamiliarization and the Design of Domestic Technologies. ACM ToCHI 12, 2 (2005).
- Bell, G., Brooke, T., Churchill, E. & Paulos, E. Intimate Ubiquitous Computing. Proc. UbiComp Workshop (2003), 3-6.
- 3. Blythe, M. and Jones M. Human Computer (Sexual) Interactions. *interactions* 11, 5 (2004), 43-46.
- 4. boyd, d. Friendster and Publicly Articulated Social Networks. *Ext. Proc. CHI. 2004* 1279-1282.
- Branwyn, G. How the Porn Sites Do it. *The Industry Standard*. March 1999, 36-38.
 www.danni.com/press/industrystan_032299.html

- Bruckman, A. "Gender Swapping on the Internet." Proceedings INET, '93. Available at http://www.cc.gatech.edu/~asb/papers
- 7. Coopersmith, J. Sex, Vibes & Videotape: Sexuality & Electrical Technology in the 20th Century. *Proceedings of IEEE ISTAS '99*, (1999).
- 8. Fiore, A. T., Frost, J., & Donath, J. S. 2004. "Scientists, designers seek same for good conversation": a workshop on online dating. *Ext. Abs. CHI'04*. 1729-1730.
- 9. Kaye, J.'J.', Levitt, M. K., Nevins, J., Golden, J., and Schmidt, V. 2005. Communicating intimacy one bit at a time. *Ext. Abs. CHI'05*, 1529-1532.
- 10.Koch, N.S. and Schockman, E. "Democratizing the Internet in the Lesbian, Gay and Bisexual Communities." In *Cyberghetto or Cybertopia* ed. Ebo, B. Praeger Publications 1998.
- 11. Maines, R.P. *Technology of Orgasm.* Johns Hopkins University Press 2001.
- 12.Muller, M., Vetere, F., Gibbs, M., Kjeldskov, J., Pedell, S. and Howard, S. Hug over a Distance. *Extended Abstracts CHI'05* 1673-1676.
- 13. Norman, Don. *The Invisible Computer.* MIT Press, Cambridge MA 1999.
- 14.O'Toole, L. *Pornocopia: Porn, sex, technology and desire.* Serpent's Tail, London, 1998.
- 15.Odzer, C. *Virtual Spaces: Sex and the Cyber Citizen.*Berkley Publishing Group, 1997.
- 16.Spink, A., Ozmutlu, H.C., & Lorence, D.P. Web searching for sexual information: an exploratory study. *Inf. Process. Manage.* 40,1, (2004), 113-123.
- 17.Turkle, S. Life on the Screen. Simon & Schuster 1995.
- 18. Vetere, F., Gibbs, M.R., Kjeldskov, J., Howard, S., Mueller, F., Pedell, S., Mecoles, K., & Bunyan, M. Mediating intimacy: designing technologies to support strong-tie relationships. *Proc. CHI'05*.

Call for Participation

Everyday interactions with technology – occurring in homes, streets and cars as much as at the office – increasingly draw upon the social, emotional and physical. There is growing interest at CHI in moving beyond cognition to examine these aspects of the human-computer experience. Sex lies at the intersection of these concerns; it is an important part of our domestic, social and emotional lives and a topic of and means for communication. Yet we tend to desexualize technology, the practices around it, and the environments into which we deploy it.

Academic discourse about sexual behavior is commonplace in anthropology, sociology, psychology, history, and essentially every area of intellectual inquiry that purports to study people. We believe that understanding human computer sexual interactions can provide HCI researchers and practitioners with a deeper understanding of established research themes in the community. For instance, online pornographers were among the first to adopt online security technology that was later adopted by the general public. The ways in which domestic and health surveillance technologies impact and are impacted by everyday sexual practices can serve as a lens to better understand issues of privacy and disclosure.

HCI is also a design-oriented discipline, and to this end it is worth understanding how an examination of sex can inform design. We believe that the rich patterns of human sexual behaviors provide opportunities both as inspiration and object for design. We welcome discussion of specific designs that consider sex as well as discussion of broad implications for HCI.

- To understand how sex and themes related to it can inform current HCI practice and discourse.
- To explore the challenges in conducting humancomputer sexual interactions research.
- To brainstorm novel technologies, interactions, and research methods inspired by human sexuality.
- To create a community for future discussion and exploration of the topic.

We encourage participation from many disciplines including computer science, design, psychology, anthropology, sociology, social studies of technology, and media studies as well as practitioners in industry. Participants will be selected based on 2-4 page position papers. We welcome papers that:

- Present a novel technology, interface or system inspired by or supportive of sexual interactions.
- Examine areas of HCI in which sex plays an important role. This includes but is not limited to online dating, online communities, intimate interfaces, production, consumption and regulation of pornography.
- Discuss field studies of technology use in which sexual practices may have impacted or been impacted by technology adoption.
- Discuss problematic areas of sex in HCI, such as abusive, immoral or criminal activity.
- Discuss implications of sexual practice on broader areas of HCI research.

We ask presenters to be sensitive other workshop participants in the presentation of their papers. Submissions should include an additional page discussing the author's background, interests, current work and its relevance to workshop goals.

Send submissions (PDF) or questions to Johanna Brewer via e-mail at johannab@ics.uci.edu.