Between research traditions: negotiating an interdisciplinary research space for urban screens

Claude Fortin, MA, PhD Student & Dr. Kate Hennessy, MAKING CULTURE LAB

EUPHORIA & DYSTOPIA | JAN 31, 2013
SIAT is an interdisciplinary research oriented school that marries art and science, using technology as the foundational medium, and with the motivation of designing with people in mind.
Making Culture Lab
Dr. Kate Hennessy
media anthropologist
Dr. Carman Neustaedter
computer scientist / ethnomethodology

Social Sciences

Science & Technology

Making Culture Lab
Dr. Kate Hennessy
media anthropologist

Fine Arts & Humanities

Jim Bizzocchi
media/gaming scholar
using interdisciplinarity
to define a research domain
Mirjam Struppek and the *Urban Screen* movement in Europe

Source: Mirjam Struppek, Urban Media Research, Berlin/Turin
Digital display inviting passersby to post their comments

Courtesy: Quartier des spectacles, Downtown Montréal, Québec
Non-digital and digital media displays, Toronto Eaton Centre

Source: flickr © 2010 Andrew Lovett-Barron
Rotating displays of frontpages of newspapers from around the world

San Francisco

Source: flickr © 2008
Alper Çuğun
Displays in fg and bg in shopping mall, San Francisco

Source: flickr © 2011 Paul Mison
Displays in fg and bg in shopping mall, Helsinki, Finland

Source: flickr © 2011 Sami Niemelä
Public interaction w/ digital displays: Brussels, Belgium

Source: flickr © 2010 Alper Çuğun
Hand from above public art project, Big Screen Liverpool, UK

Source: flickr © 2009 Chris O’Shea
Outdoor digital display broadcasting hockey game at Air Canada Centre in Toronto, Ontario Source: Internet
The YeTi interactive displays support a shared lab environment between Fuji Xerox in Japan and FXPAL in Palo Alto, CA.

Source: FxPal
Dynamic media façade on university campus building

Courtesy: Quartier des spectacles, Downtown Montréal, Québec
LED ambient digital display behind glass pane on main street

Courtesy: Quartier des spectacles, Downtown Montréal, Québec
Street sign and mural painting on House of Cn. Audius Bassus (left) and frontal façade of Thermopolium of Asellina (right). Street view of Via dell'Abbondanza’s excavated ruins, Pompeii, Italy. Ancient Roman Empire, c. 79 CE. Source: (ARTstor)
Electoral inscriptions, election propaganda and graffiti painted on façade of the excavated ruin of the Thermopolium of Asellina (Asellina’s Tavern) in Pompeii, Italy. Ancient Roman Empire, circa 79 CE. Source: (ARTstor)
Times Square, NY, 2006: the digital billboard aesthetic Paul Virilio called “The Electronic Gothic” Source: Internet
Times Square, NY, circa 1930.
Source: (Neumann, 13)
Ecological approach to urban screens:

• digital displays in a real world environment
• architectural setting
• public space

→ interfaciality occurs in a complex way w/ many elements
using interdisciplinarity
to tailor research methodologies
ACM Creativity & Cognition 2013 submission:

“Medium-specific properties of urban screens: Towards an ontological framework for digital public displays”

medium specificity = fine arts approach foreign to HCI
Medium-specificity

• medium-specific properties ≠ HCI def. of affordances

• first emerged as a critical method in the humanities

• has since been used by studio artists in praxis

⇒ what are the phenomenological properties of a medium?
Painting: Detail of Plato and Aristotle from Raphael’s *The School of Athens*. C. 1510. Source: (ARTstor)
Design ethnography

“its tradition is in analysing practice, rather than inventing the future” (Button and Dourish, 1996)

Scientific method

testing hypotheses is not exactly a creative process
How do we invent the future in HCI design?
Utopic house design by Buckminster Fuller, *4D House*, from portfolio *Inventions: Twelve Around One*, 1981. Source: SFMOMA.
Béhar, Yves. *One Laptop Per Child XO Laptop*. 2007. Plastic. 3.8 x 22.9 x 24.1 cm. Source: SFMoma
Richter, Gerhard. *830-1 Abstract Bild, Mohn*. 1995. Oil on linen. 140 cm x 200 cm. Source: (ARTstor)
an abductive approach to invent the future

- process-oriented
- exploratory
- open-ended

discover the medium
(= medium-specificity)
using interdisciplinarity to put research ethics in practice
Humanities

what does the past tell us about technologies?

Social Sciences

what does the present tell us about technologies?
Assumptions of the **MAKING CULTURE LAB:**

Knowledge is produced in 3 sites of inquiry

the field — the studio — the lab

Courtesy: Dr. Kate Hennessy
Bird's eye view of 8 architectural scale permanent media façade infrastructure in 1 km².

Courtesy: Quartier des spectacles, Downtown Montréal, Québec
collaborative methodologies
is research ethics-in-practice
in the production of
knowledge and artifacts
interdisciplinarity
and research challenges
Interdisciplinarity: challenges

finding research collaborators
and academic mentors
Interdisciplinarity: challenges

where do we present and publish?
Interdisciplinarity: challenges

funding is usually allocated by discipline, not by project
Interdisciplinarity

Pros:
• access to a wider body of knowledge and corpuses
• access to more research methods and tools
• possibility of defining new research spaces
• easier to practice ethical research in the real world

Cons:
• academic disciplinarity can be an administrative barrier
• lack of expertise in a research domain
• difficult to find collaborators and mentors in research