

Privacy in the Arts: A Case Study of A Theater Company

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Patron data is a
growing medium



J.B. Spector/Museum of Science and Industry, Chicago





Biometric Mirror

Niels
Wouter
et al.

Values in...

Privacy Frameworks

Art

Values in...

Privacy Frameworks	Art
<ul style="list-style-type: none">● promote psychological comfort by design	<ul style="list-style-type: none">● disrupt psychological comfort by design
<ul style="list-style-type: none">● protects against sketchy data practices for ulterior motives	<ul style="list-style-type: none">● critique ulterior motives using sketchy practices or forms
<ul style="list-style-type: none">● informed consent	<ul style="list-style-type: none">● surprise, delight, shock value, provocation
<ul style="list-style-type: none">● respect for social norms	<ul style="list-style-type: none">● disrupt social norms

Institutional factors in...

Privacy Frameworks	Art
<ul style="list-style-type: none">• calls for technical and legal expertise	<ul style="list-style-type: none">• artists often self-trained technologists
<ul style="list-style-type: none">• reliance on legal & compliance frameworks	<ul style="list-style-type: none">• critique of legal & compliance structures
<ul style="list-style-type: none">• digital privacy notices or other interfaces	<ul style="list-style-type: none">• unusual interfaces (art gallery? performance art?)
<ul style="list-style-type: none">• large institutions, substantial resources	<ul style="list-style-type: none">• small institutions or individuals, little resources

How to make privacy
practices 'work' in art
institutions?

How to balance
tensions in values?

Example:

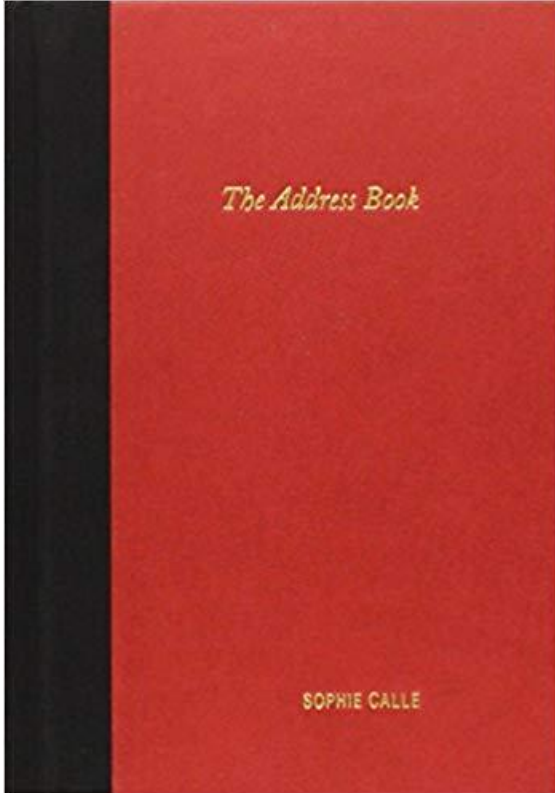
Sophie Calle

The Hotel (1979)

Took a job as hotel cleaning staff in order to examine & photograph guests' rooms without permission.



The Address Book (1983, fully published 2012)



Calle found an address book on the street.

Contacted everyone in the book, asking them for stories about the owner.

Made copies of the book.

Published a write-up in a newspaper

(Owner later threatened to sue)

What would Sophie
Calle have done with
some coding skills?

Example:

Deng Yufeng

“346,000 Wuhan Citizens’ Secrets” (2018)



Purchased data on 346,000 people living in Wuhan

Printed & displayed in gallery

Texted 10,000 invitations

One text reply: “You’re sick.”

Photo by Deng Yufeng, in *New York Times*

(A Preliminary)
Case Study:
An Immersive Theater
Show

Immersive Theater Culture

- Working metaphor is autonomy within a ‘container of safety’
- “I don’t care whether you’re comfortable; I care whether you’re safe” -Bricolage executives
- “Bricolage’s mission is to immerse artists and audiences in adventurous theatrical experiences that foster connections and alter perceptions.” -mission statement

Examples:

Surprise & norms





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PROJECT AMELIA

TAKE CONTROL

Writer & Conceiver: Michael Skirpan | Production: Bricolage Production Co & Probable Models | Sept 20

Privacy in Art - Maggie Oates - PEPR19



**PROBABLE
MODELS** 

The logo for Probable Models consists of the words "PROBABLE" and "MODELS" stacked vertically in a bold, black, sans-serif font. To the right of the text is a graphic element: a black triangle with several white lines radiating from its base towards its apex, creating a fan-like or sunburst effect.

+ many
independent
artists,
developers,
architects,
actors,
stagehands,
volunteers

- Setting: speculative tech company
- Creative purpose: help patrons explore implications of emerging technology
- Real tech
 - Indoor localization system
 - Collection of patron data from Facebook, Twitter, etc
 - Installations built by independent artists that use patron data; RFID bracelet
 - mobile app

Values in...

Privacy Frameworks

- promote psychological comfort by design
- protects against sketchy data practices for ulterior motives
- informed consent
- respect for social norms

Art

- disrupt psychological comfort by design
- critique ulterior motives using sketchy practices or forms
- surprise, shock value
- disrupt social norms

Research Perspective

- involved in project since September 2018
- lots informal observational data from months of meetings, interactions
- three (very) alpha experience tests
- beginning stages of formal interviews with production team

Alpha Test

Alpha Test Goals (March 2019)

- Invited patrons to a mini event with setting of fictional tech company
- Wanted to embed real tech in fictional narrative
- Gather opinions on data collection

“But because it's Bricolage, when you come in **you question everything**. So yeah, she has a CMU tag but those are easy to make.”

-Alpha test patron

Takeaway

Need to put in the work to
delineate fact and fiction

Takeaway

Production team
recognized need to sketch
out norms

Privacy Engineering Challenges

- encryption at rest vs processing resources
- authentication style needs to accommodate a wide variety of users, across
 - tech savviness, smartphone nonusers
 - familiarity with context
- installations built by artists with variety of technical backgrounds
- in-show hacking

Privacy Affordances

Can experience show with or without sharing external data

- *But how does the experience change?*
- Creative team takes stance that sharing improves your experience.

Understanding Project Amelia's Use of Data

Yes, we are **hoping you'll share data with us.**

Why?

We are very protective of your data and only ask that you share it to have an enhanced experience. The data you share is for your personal betterment only and will be in your control until it is deleted when you are done with Aura.

We store **two kinds of data** on you:

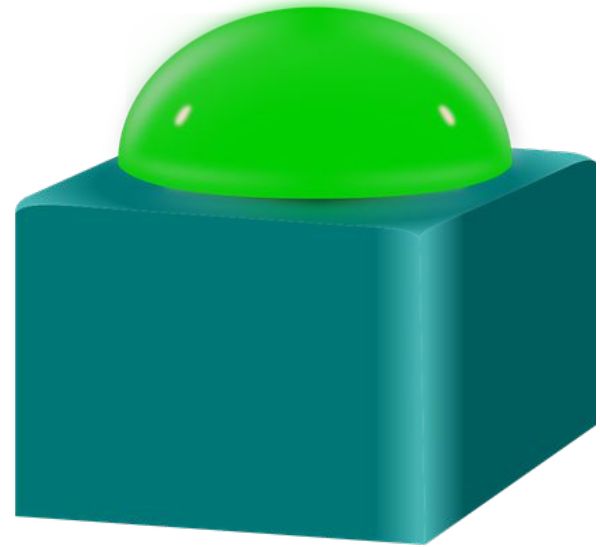
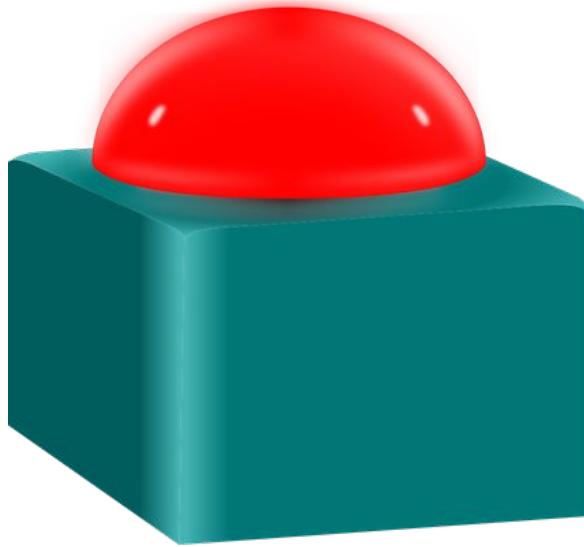
A. public profile data

CONTINUE

RFID bracelets



Data Deletion



Takeaway

Usually possible to
incorporate privacy
affordances as dramatic
elements

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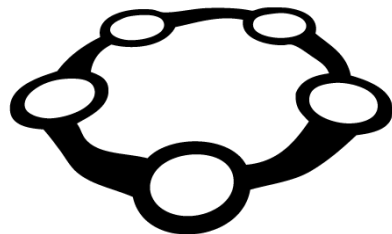
1. Art needs you (take the pay cut!)
2. Despite art's purpose to critique and disrupt norms, artists and engineers still have an obligation to identify privacy norms.

With Colleagues

- Lorrie Cranor (CMU)
- Michael Skirpan (CMU)
- Robert Cunningham (CERT)

- Alice Shashkina (CMU)
- Yixiao Fu (CMU)

- Cylab Presidential Fellowship
- K&L Gates Fellowship in Ethics & Computational Technology



BRICOLAGE
PRODUCTION COMPANY

**PROBABLE
MODELS** 

References

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<https://socialnui.unimelb.edu.au/research/biometric-mirror/>
- *The Hotel*. Sophie Calle. 1978. (@todo cite properly)
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- Sui-Lee Wee and Elsie Chen. 2018. The Personal Data of 346,000 People, Hung on a Museum Wall. [The New York Times](#).
- Bricolage Production Co: <https://www.bricolagepgh.org/>
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- “Project Amelia.” 2019. Michael Skirpan, Bricolage Production Co, and Probable Models. <https://www.bricolagepgh.org/programs/program-listings/projectamelia/>

More Privacy Art

- “6 Art Projects Prying The Lid Off Online Privacy.” Vice. 2012.
https://www.vice.com/en_us/article/4x4p43/6-art-projects-prying-the-lid-off-online-privacy
- Like, everything at Eyebeam: <https://www.eyebeam.org/>
- “Amazing mind reader reveals his ‘gift.’” Video by Duval Guillaume.
<https://www.youtube.com/watch?v=F7pYHN9iC9I&feature=youtu.be>
- Send your examples to moates@cmu.edu