Learning From Privacy Artworks to Design More Effective Privacy Communication

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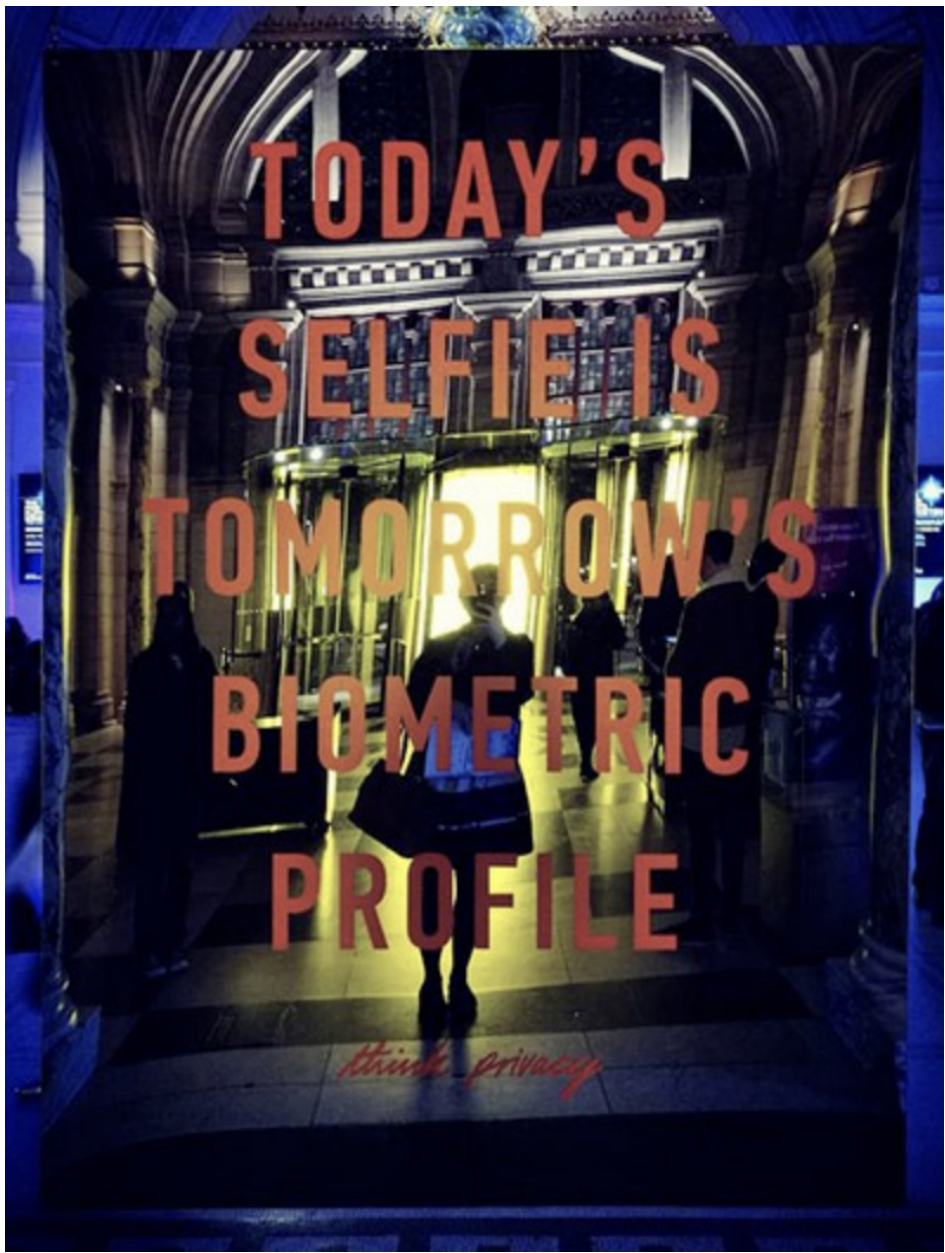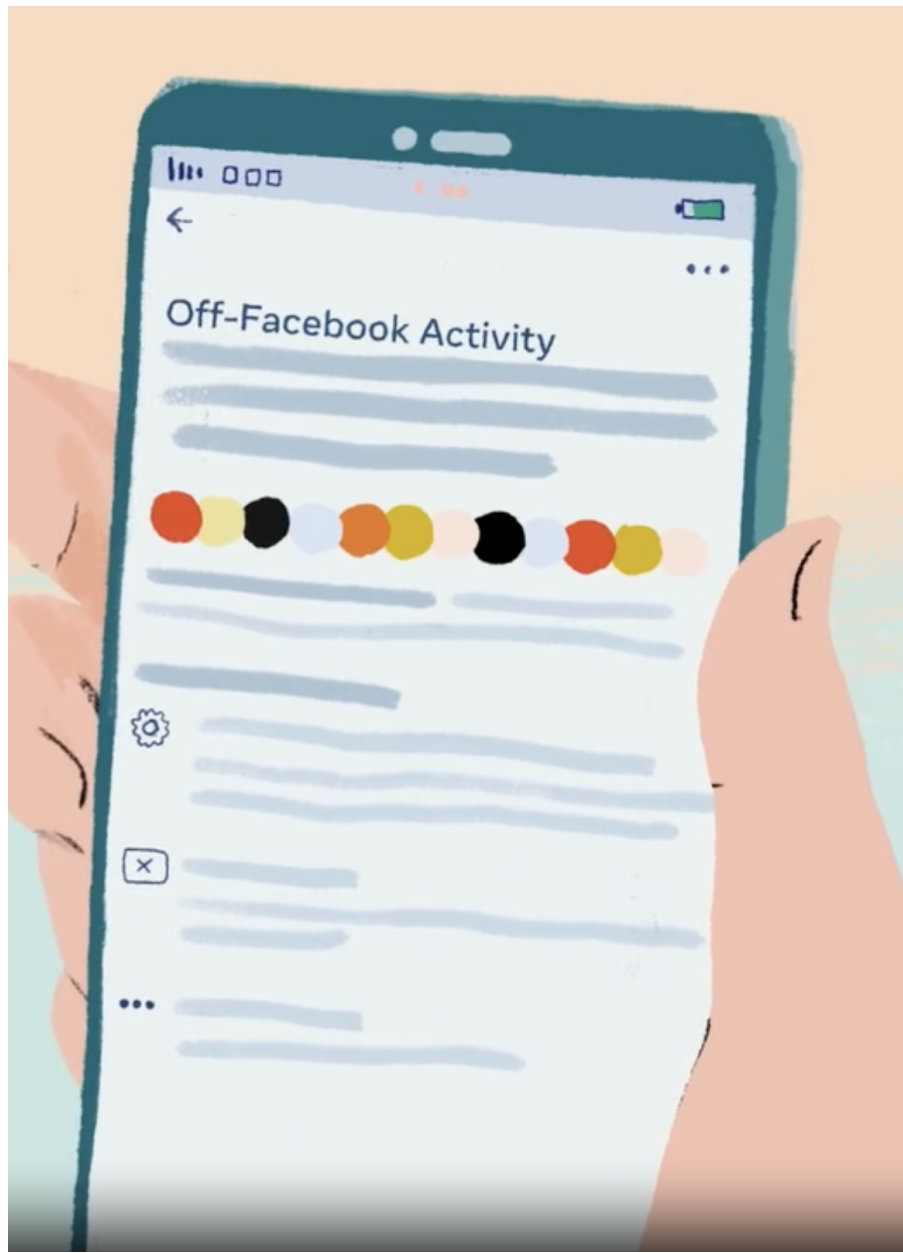[1]University of Chicago   *Equal contribution

Motivation

- Current methods for communicating privacy are often **perceived as boring** (e.g., privacy policies) [1, 4, 9].
- Proposed methods for visualizing privacy [6, 9] are limited in **grabbing user attention** and **communicating urgency**.
- Some companies (e.g., Meta, Google) use cheerful video explanations to communicate high-level privacy practices rather than the **consequences of privacy decisions** [3, 8].

Art can evoke emotion and could help give insight into how to highlight the urgency of privacy decisions.

(a) "Think Privacy" mirror, Adam Harvey, 2017 [5].

(b) Screenshot of a video embedded in Meta's privacy policy, 2024 [8]

Figure 1. Comparison of an artist and corporate representation of privacy.

Goals

1. Develop a **database of privacy artwork**.
2. Create a **taxonomy of artistic techniques and themes** in privacy artwork.
3. Gain insight into novel **strategies for communicating privacy** information.

Future Work

We will **compare our taxonomy to current privacy communication strategies**. We will develop **new methods for communicating privacy** to users. We will **run user studies** to understand the **impacts of these techniques** through the creation of:

- **Public art installations:** educational installations in museums.
- **User interface design:** visualizations associated with consumer-facing digital technologies.

References

[1] Susanne Barth, Dan Ionita, and Pieter Hartel. Understanding online privacy—a systematic review of privacy visualizations and privacy by design guidelines. *ACM Comput. Surv.*, 55(3), February 2022.

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[3] Google. Privacy policy, 2024. https://policies.google.com/privacy?hl=en-US.

[4] Hana Habib, Yixin Zou, Yaxing Yao, Alessandro Acquisti, Lorrie Cranor, Joel Reidenberg, Norman Sadeh, and Florian Schaub. Toggles, dollar signs, and triangles: How to (in)effectively convey privacy choices with icons and link texts. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, CHI '21, New York, NY, USA, 2021. ACM.

[5] Adam Harvey. Think privacy, 2018. https://adam.harvey.studio/think-privacy/.

[6] Patrick Gage Kelley, Joanna Bresee, Lorrie Faith Cranor, and Robert W. Reeder. A "nutrition label" for privacy. In *Proceedings of the 5th Symposium on Usable Privacy and Security*, SOUPS '09, New York, NY, USA, 2009.

[7] Lauren Lee McCarthy. Someone, 2019. https://lauren-mccarthy.com/SOMEONE.

[8] Meta. Privacy policy, 2024. https://www.facebook.com/privacy/policy/.

[9] Florian Schaub, Rebecca Balebako, Adam L. Durity, and Lorrie Faith Cranor. A design space for effective privacy notices. In *Eleventh Symposium On Usable Privacy and Security (SOUPS 2015)*, pages 1–17, Ottawa, July 2015. USENIX Association.

Methods

Collecting Artwork

We have cataloged over 200 pieces of privacy art and continue to use our structured discovery process to find more.
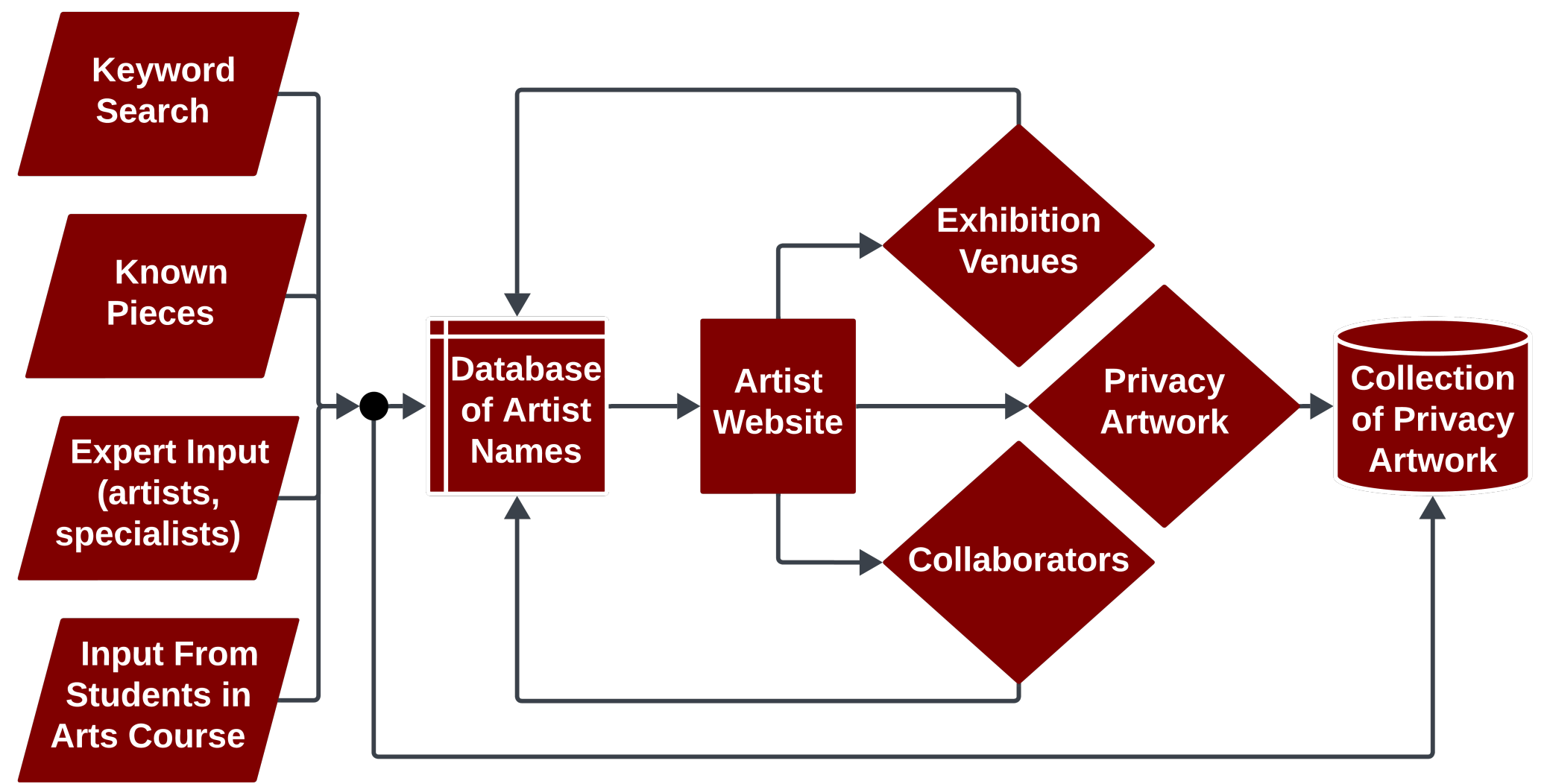

Figure 2. Diagram showing the artwork collection process.

We set inclusion criteria based on exploring methods that could be used to communicate privacy to consumers.

Include	Exclude
1. Visual art	1. Music, literature, film
2. Shown at a gallery, conference, etc.	2. No public record
3. Artist or audience interpretation of privacy	3. Not commonly linked to privacy
4. Focused on user privacy	4. Focused on government orgs (e.g., CIA, NSA)

Table 1. High-level table describing inclusion and exclusion of pieces for the collection of privacy artwork.
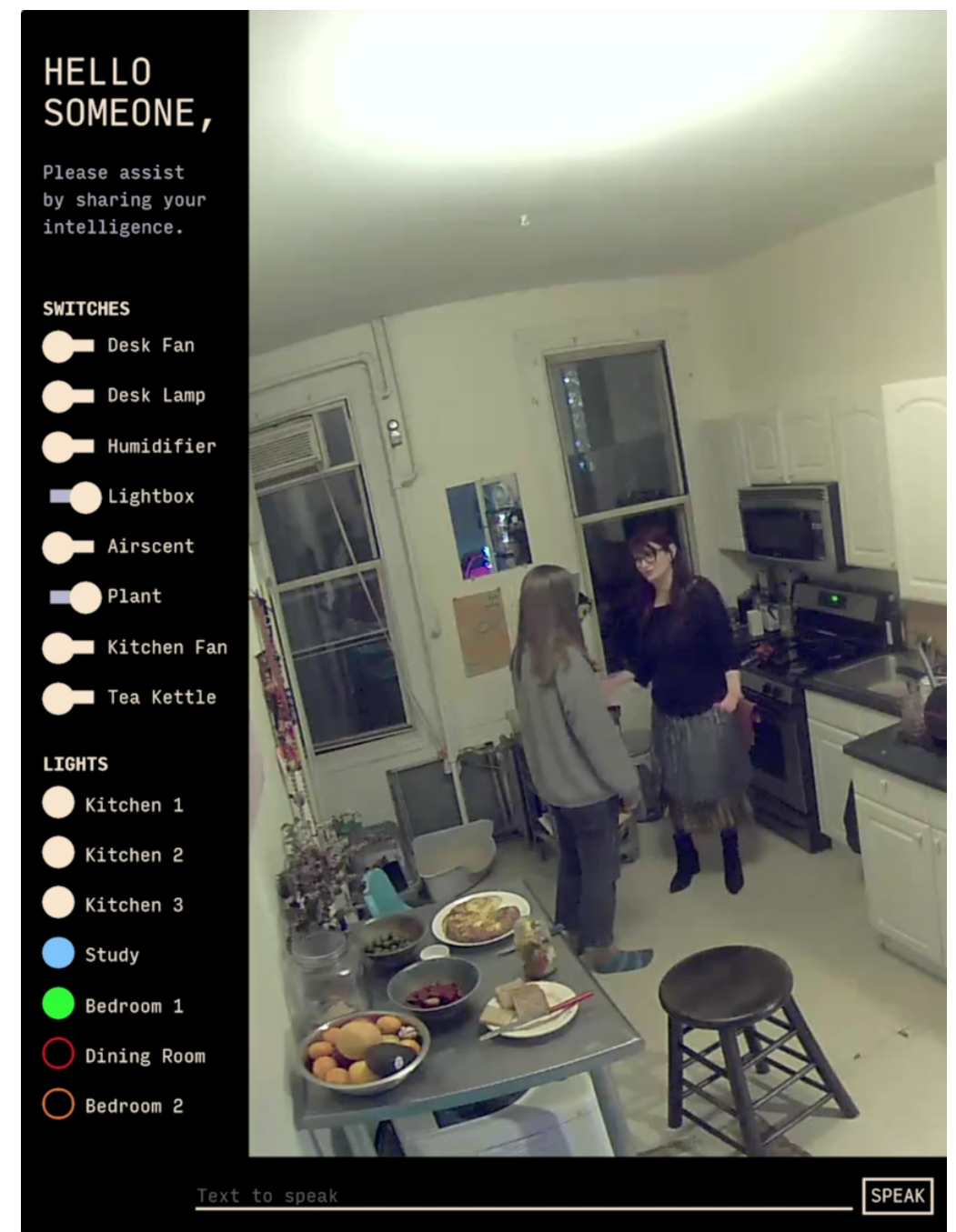
Creating a Taxonomy of Privacy art

Two researchers will complete iterative open coding to generate a codebook. For each piece we will collect:

- **Artistic intent** (e.g., artist statements, interviews)
- **Audience interpretation** (e.g., news, publications)

(a) "Surveillance Speaker", a surveillance camera that verbalizes what it sees, Dries Depoorter, 2018-2024 [2]

(b) "SOMEONE", viewers can control smart devices in a participants' home, Lauren Lee McCarthy, 2019 [7]

Figure 3. Examples of artwork related to privacy in different mediums.