Dark Patterns and Deceptive (UX) Design

Daniel Campos Zamora

My background

2015
Graduated CMU Art and Psychology

2017-2019
Imagineer working on robotics and interaction research

2015
Started PhD

CMU	CMU ArtFab	Disney Research	ArtCenter	UW

2015-2017
Worked at interdisciplinary art and electronics lab space

2020
Managed 3D design space and digital fabrication space
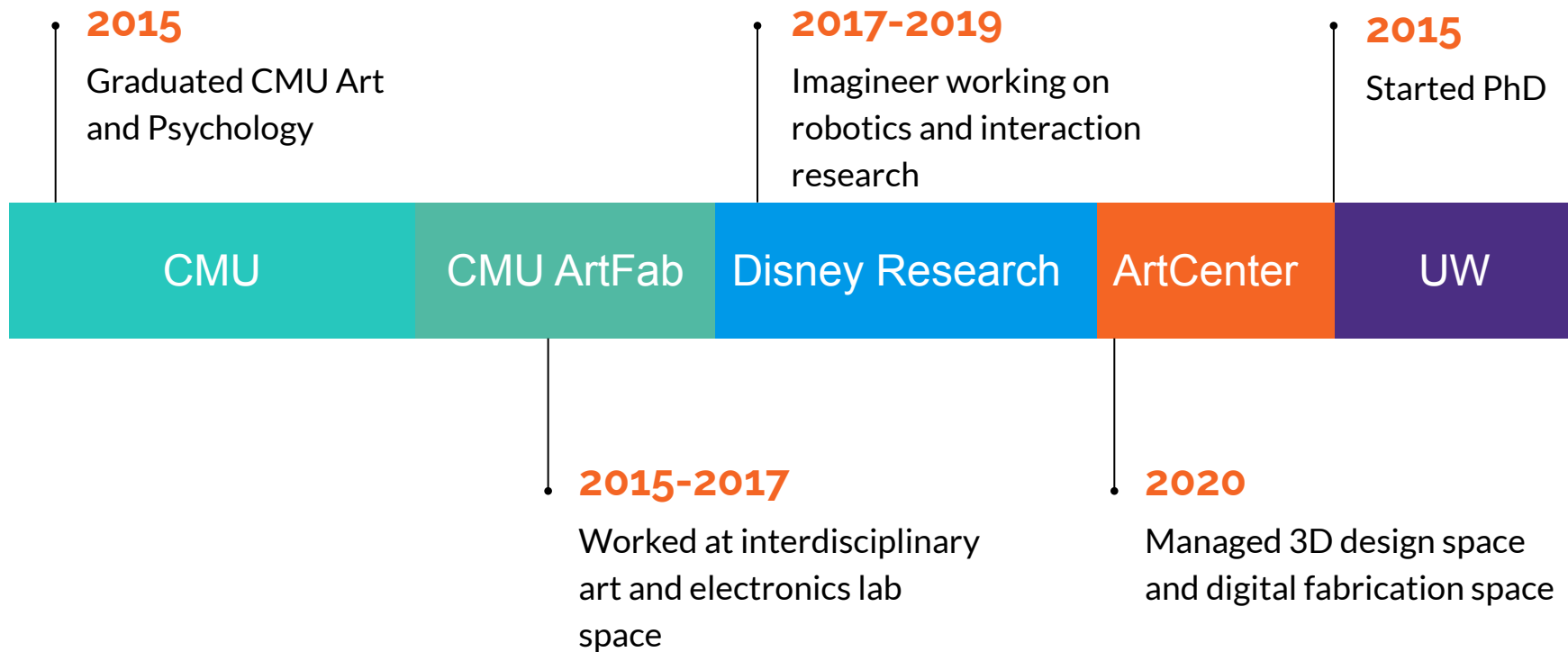
Previous Work

Magic Bench

CAMERA
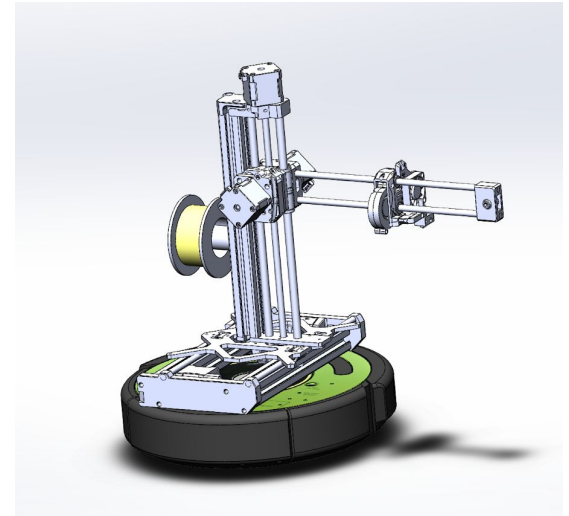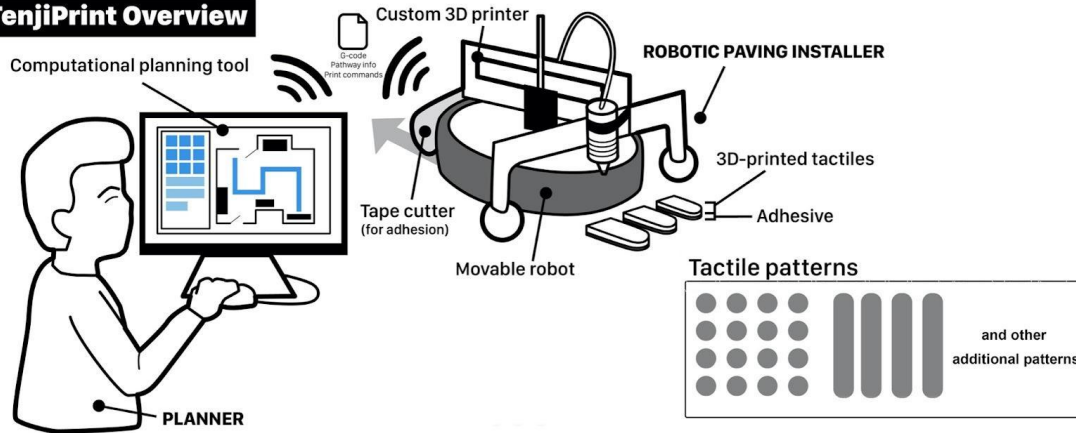OBSCURA

CITIZEN

metro
FREE DAILY

metro
FREE DAILY

Disney Research

© Disney

What I do now?

Research in fabrication, accessibility and tangible interfaces.

Dark Patterns

Designs that leverage knowledge of human behavior and psychology to get users to perform actions that go against their best interest

Harry Brignull

Can you think of any dark patterns?

Note

Dark patterns shouldn't be confused with "poor" design since these can be very aesthetically pleasing and effective

Types of Dark Patterns

Bait and Switch

Disguised Ad

Forced Continuity

Friend Spam

Hidden Costs

Misdirection

Price Comparison Prevention

Privacy Zuckering

Roach Motel

Sneak Into Basket

Trick Questions

Confirmshaming

(Brignull)

Overview

NAGGING

Redirection of expected functionality that persists beyond one or more interactions.

OBSTRUCTION

Making a process more difficult than it needs to be, with the intent of dissuading certain action(s).

INCLUDES:
Brignull "Roach Motel," "Price Comparison Prevention," and Intermediate Currency

SNEAKING

Attempting to hide, disguise, or delay the divulging of information that is relevant to the user.

INCLUDES:
Brignull "Forced Continuity," "Hidden Costs," "Sneak into Basket," and "Bait and Switch"

INTERFACE INTERFERENCE

Manipulation of the user interface that privileges certain actions over others.

INCLUDES:
Hidden Information, Preselection, Aesthetic Manipulation, Toying with Emotion, False Hierarchy, Brignull "Disguised Ad," and "Trick Questions"

FORCED ACTION

Requiring the user to perform a certain action to access (or continue to access) certain functionality.

INCLUDES:
Social Pyramid, Brignull "Privacy Zuckering," and Gamification

(Gray et al, 2018)

Nagging

➔ Repeated Intrusion during normal interactions, where normal use is interrupted one or more times by other tasks not directly related to the one the user is focused on now

➔ Varying levels of malice like increasing engagement to getting users to provide more private details
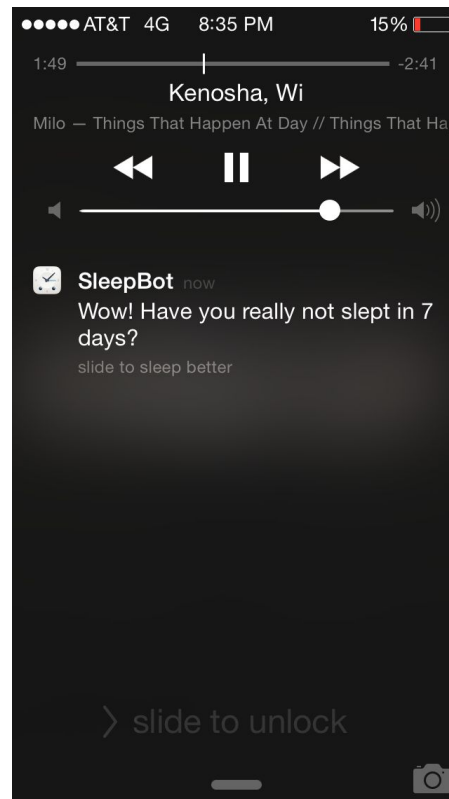
Nagging Examples

Obstruction

→ Impeding task flow, making an interaction more difficult than it needs to be

→ Includes Brignull's "Roach Motel" which makes it easy to sign onto a service but difficult to get out

→ Includes Brignull's "Price Comparison Preventions" which makes direct comparisons between products and services unnecessarily hard

Obstruction Examples
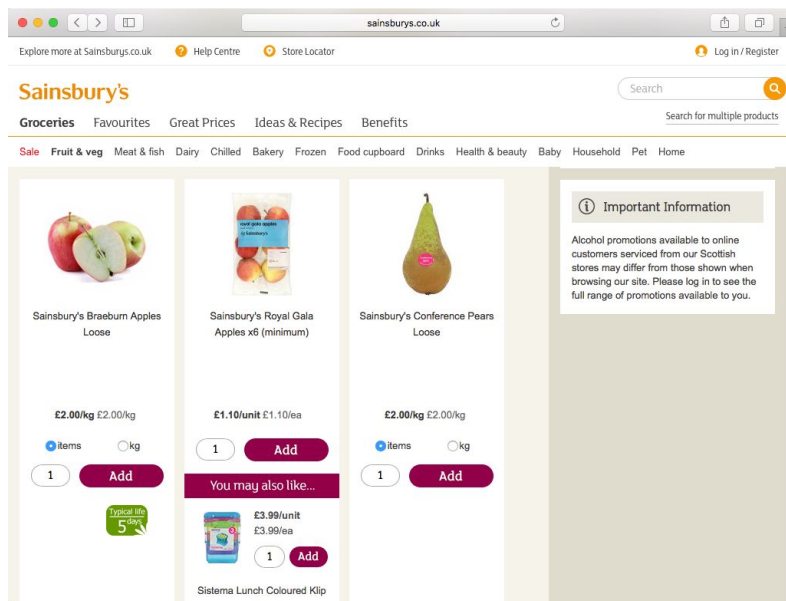
Agreement to Arbitrate

You and PayPal agree that any claim or dispute at law or equity that has arisen or may arise between you and us (including claims or disputes that arise out of or relate to the Venmo services or your Venmo account) will be resolved in accordance with the Agreement to Arbitrate provisions set forth below. Please read this information carefully. Among other things it:

- Affects your and our rights and will impact how claims between you and us are resolved, including your and our agreement to waive the right to trial by jury.
- Includes a **Prohibition of Class and Representative Actions and Non-Individualized Relief** pursuant to which you agree to waive your right to participate in a class action lawsuit against us.
- Requires you to follow the **Opt-Out Procedure** to opt-out of the Agreement to Arbitrate by mailing us a written notice. If you are a new user, the opt-out notice must be postmarked no later than 30 days after the date you accept this user agreement for the first time. If you are a current Venmo user and previously accepted the User Agreement prior to the introduction of this Agreement to Arbitrate on May 23, 2022, the opt-out notice must be postmarked no later than June 22, 2022.

Sneaking

→ Attempt to hide, disguise or delay information relevant to the user

→ "Forced Continuity" pattern which continues to charge for a service after the purchase expires

→ "Hidden Costs" which delays pricing information for certain items

→ "Sneak into Basket" where additional services or products are added or "suggested"without by default

→ "Bait and Switch" makes it seem like an action will cause one result but ends up doing an undesired action

Sneaking Examples

Analytics Cloud

App Cloud

IoT Cloud

These are not subscriptions. By making a selection we can make sure you also receive additional communications relative to your interest.

You have been unsubscribed from all future mailings

☑ I agree to the Privacy Statement. In particular, I consent to the transfer of my personal information to other countries,including the United States, for the purpose of hosting and processing the information as set forth in the Privacy Statement. [-]

I understand that these countries may not have the same data protection laws as the country from which I provide my personal information. I have the right to withdraw my consent at any time. For more information, click here.

*You can unsubscribe from Marketing emails at any time. Please note that opting-out of Marketing communications does not affect your receipt of business communications that are important to your interaction with Salesforce, such as support/service communications, security updates, event registration updates or account management communications.

Save All Changes

Total	$27.26 ^
Tickets	
Verified Resale Tickets: $6.00 x 2	$12.00
Fees	
Service Fee: $5.00 x 2	$10.00
Order Processing Fee	$2.95
Delivery	
Go Mobile	Free
Tax	$2.31

Cancel Order

TODAY'S SALE!- VALID ONLINE ONLY- *Up To 45% Off + Free Local Delivery

① Delivery Info   ② Billing Info   ③ Review & Place Order

Need assistance? We are here to help! Call us any time at **877-638-3303**

Log in to apply your points or discounts and earn even more points towards future purchases

SHOPPING CART

Item	Qty	Price	Subtotal
Dreaming of Tuscany Selected: "As Shown" 2nd choice: similar as possible, same look and feel	1	$52.99	$52.99
Greeting Card Service Selected: "STANDARD"	1	$3.99	$3.99

Interface Interference

→ Design purposefully focuses your attention on one thing in order to distract from another, confusing or limiting discoverability of important actions

→ "Misdirection" and "Disguised Ads" and "Trick Questions" fall in this category
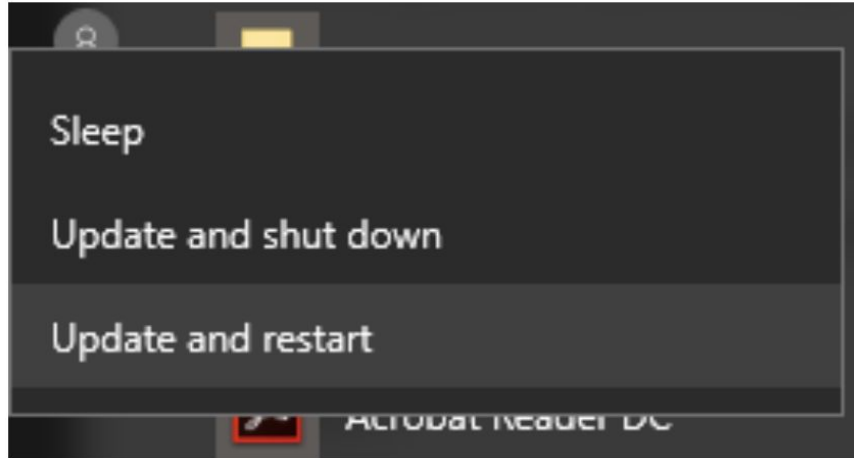
Interface Interference Examples
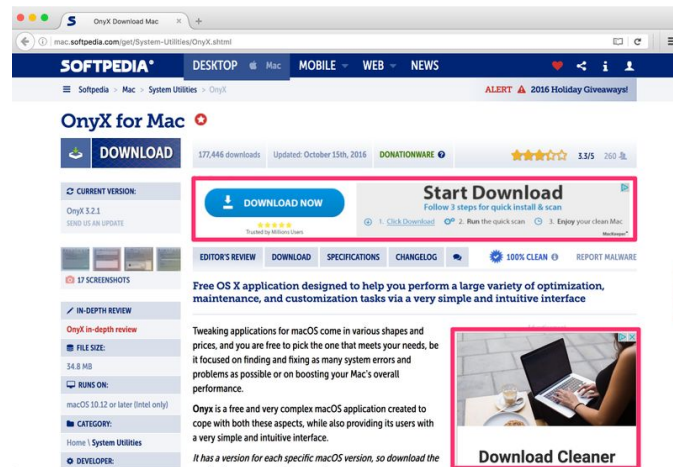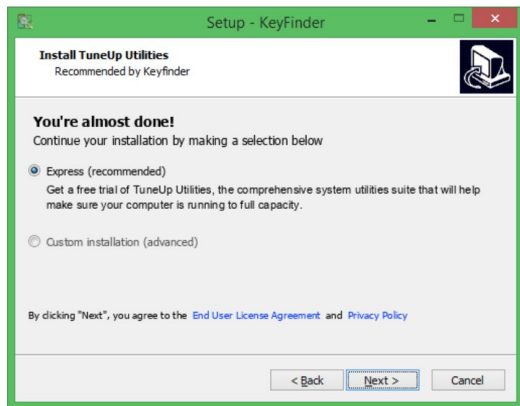
Forced Action

→ Design purposefully focuses your attention on one thing in order to distract from another, confusing or limiting discoverability of important actions

→ "Misdirection," "friendspamming" and "Disguised Ads" and "Trick Questions" fall in this category

Forced Action Examples

Takeaways

Strategies for dark patterns undermine a person's autonomy and favor stakeholders over users

Factors that lead to dark patterns

- Aggressive growth targets
- Overfocus on simple key performance indicators(KPI)
    - More Clicks
    - More Signups
    - More Sales
- Myopic view of product success
- Profit
- Lack of Testing
- Greed

How to avoid deceptive design as a practitioner

- Develop a strong "character" as a designer/developer
- Have a code of ethics
- Be empathetic
- Use value sensitive design tools like envisioning cards or humane by design tools
- Prioritize users over shareholders