Design for Social Behavior Change

Team 5

Alicia Valencia, Alynna Sanchez, Anne Cramer, Eli Vicarte, Yanqi Guo, Yuexing Hao

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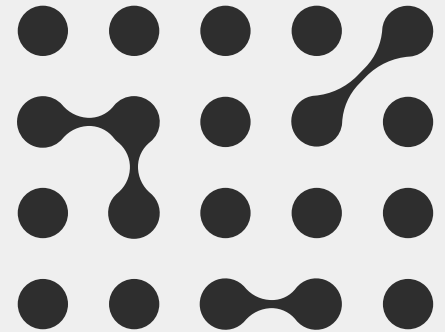
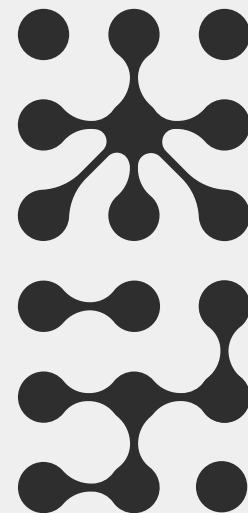# 01

INTRODUCTION

What is meant by design for
social behavior change?

Social Design

■ A broad term that brackets the diverse practices and domains concerned with the role of design in human and humanitarian social engagement, comprising anything from tangible objects to virtual services, from organizational design to design for developing countries.

(Veiga & Almendra, 2014; Gardiner & Niedderer, 2017)
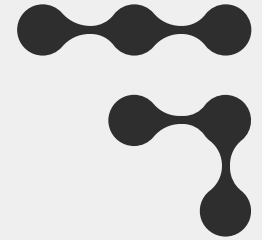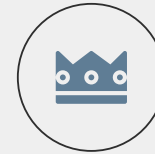
Approach Examples

Survival

Addressing humanitarian needs & human rights
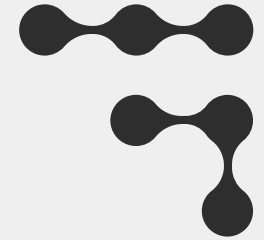
Citizenship

Addressing systemic human challenges

Politics

Addressing institutions & sectors seeking to influence the course of human life

...though there are many more

(Veiga & Almendra, 2014; Gardiner & Niedderer, 2017)

Influencing Human Behavior

Intention

Responsibility for the change

Process

How to achieve the change

Outcomes

User experience of the change

(Gardiner & Niedderer, 2017)

Santiago Cirugeda: *Taking back the street / Recuperar la calle (1997-)*. Urban Hacktivism.

Intention

Design activism: "design plays a central role in (1) promoting change, (2) raising awareness about values and beliefs, or (3) questioning the constraints of mass production and consumerism on people's daily life"

(Markussen, 2013)

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Intention *(other examples)*

Performative interventions

Bogotá mayor Antanas Mockus - Traffic mimes in Bogotá

Design changing political opinion

Women on Waves mobile abortion room - by Doctor Rebecca Gomperts (1999)

Process

Design methods: tools and activities for the purpose of influencing human interaction for some perceived social benefit

understanding user experiences, ideation, rapid prototyping and visualization.

(Gardiner & Niedderer, 2017), (Mulgan, 2014).

Process *(other examples)*

IDEO Design Kit

[Field Guide and Resources](#)

The Knee High Design Challenge, and Urban95

Knee High Design Challenge [Vision Document](#); [Gehl's Public Space Public Life survey for Urban95](#)

Outcomes

Anti-Homeless Architecture

Design environment: how the environment and products within it play a role in determining how people interact, experience, and process social information, either consciously or subconsciously

(Gardiner & Niedderer, 2017)

Outcomes *(other examples)*

Graphical User Interfaces (GUI)

Exhibition Road - London
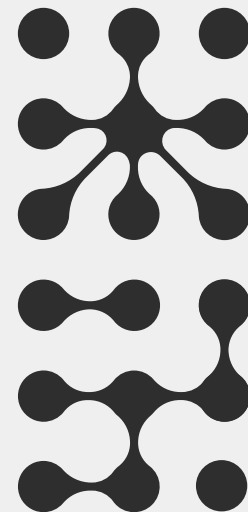

Shared Space Model

(Gardiner & Niedderer, 2017)
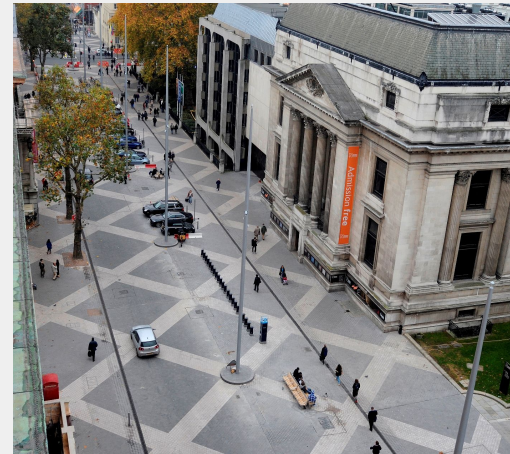
02

CASE STUDIES

Applying methods to the real world ▪

Dutch Covid-19 digital contact-tracing app hackathon

In April 2020, the Dutch government announced a public, two-day appathon (hackathon) hosted at the Ministry of Public Health to develop a Covid-19 contact-tracing app. They partially live-streamed the event and invited multidisciplinary academics and professionals to review the proposals.

Intention:

To develop an app with a **transparent, collaborative** approach that **engaged citizens** (democratic practices).

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(Ozkaramanli et al., 2022)

The Facts

Setting up:

- Before the appathon, the Ministry created 4 design requirements (privacy, security, effectiveness, user-friendliness) to evaluate proposals on.
- The Ministry selected consulting firms to participate in generating ideas, as well as multidisciplinary professionals and academics (experts) to review and talk about the proposals alongside the software engineers. The selection procedure was not made public.
- Out of 700 applications, 7 proposals were selected to be reviewed for the appathon.
- It was established that citizens would be able to ask questions through social media.

(Ozkaramanli et al., 2022)

The Facts

The event:

- There was 1 presenter who facilitated the entire event, acting as the TV presenter, critical viewer, and discussion leader.
- Questions were answered in Q + A format. Citizens asked questions online, and the presenter had control over which ones he would pose to the panel of experts and engineers for discussion. It was not revealed how questions were selected, and there were more questions asked than answered.
- When the engineers answered questions from the experts, there was an enforced 30 second limit.
- Follow-up questions were often not allowed.
- On the first day, the engineers were allowed to change their app based on feedback they received.

(Ozkaramanli et al., 2022)

Think Pair Share (3 min.)

What stands out to you about this process? Do you think the Ministry achieved their desired outcome based on the intentions of using a **transparent**, **collaborative** approach that **engaged** citizens?

Process & Democratic values not aligned

Direct Citizen Participation

The use of social media to gather citizens' questions and filtering from the presenter demonstrates an indirect citizen involvement. While the transparency of the appathon generated more questions, it was unclear how citizen input was considered after the event. Citizens were not treated as co-creators.

Collective Decision Making

The strictly moderated Q+A sessions restrained collective decision making by eliminating real discussion. Experts on the panel were unable to ask follow-up questions to the engineers, and there was a time pressure to answer. Lastly, the solution (an app) was pre-determined by the Ministry, not through group agreement.

Critical Engagement

The experts' critical questions about the brief and to the software engineers were met with vague responses, limiting their ability to engage critically with the topic and make informed judgements. Time pressures also affected this by reducing discussion time.

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(Ozkaramanli et al., 2022)

Social Stairs

To promote healthy lifestyles in an inactive office environment, researchers in the Netherlands implemented a musically interactive interface to steps at a staircase.

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(Future Internet, 2016)

Social Stairs (cont)

At the end of 6 months of data collection, they implemented a machine learning algorithm to determine deviants in the data. For future research, they wish to expand upon this experiment to determine individual behaviour changes among users.

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(Future Internet, 2016)
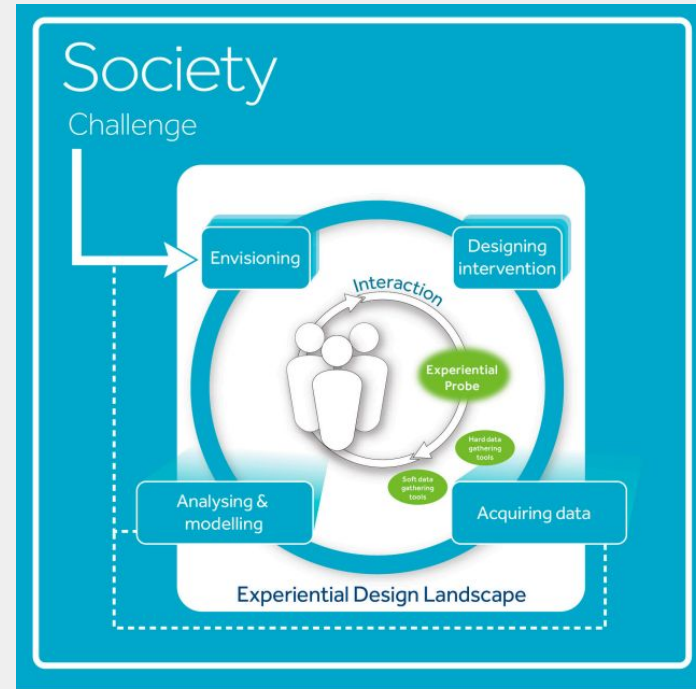
Think Pair Share (3 min.)

Discuss the intention, process, and outcomes of the social stairs experiment.

Influencing Human Behavior

Intention

Responsibility for the change

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User experience of the change

(Gardiner & Niedderer, 2017)

03

ACTIVITY

Addressing a societal ◼
problem with design thinking
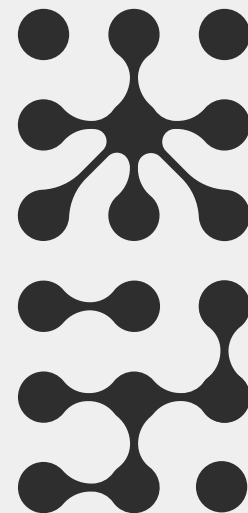
Getting out the Vote

U.S. voting-age population (VAP) turnout is still behind many other countries

01 Approximately 240 million people were eligible to vote in the 2020 presidential election and roughly **66.1%** of them submitted ballots, totaling about 158 million. Midterm elections generally average ~40%. [1]

02 The voting-age population in the 2020 presidential election against recent national elections in 49 other countries, the U.S. ranks **31st** – between Colombia (62.5%) and Greece (63.5%).

References: 1. Desliver Dr. (2022)"Turnout in U.S. has soared in recent elections but by some measures still trails that of many other countries". PEW Research Center.
2. New York Times Editorial Board (November 11, 2014). "Opinion | The Worst Voter Turnout in 72 Years". The New York Times. ISSN 0362-4331. Retrieved January 29, 2018.

TIME FOR A
CREATIVE WHACK!!

Each team will select a card to address **VOTER TURNOUT** in the activity
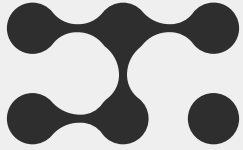
Please form a 2-3 people team to play this Whack Pack game!

Creative Whack Pack
Exercise: Voting

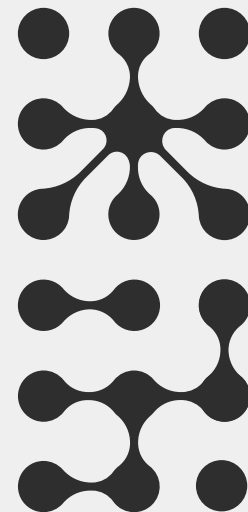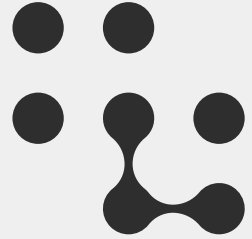Card Name _____

Intention

Process

Outcome

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IMPLICATIONS

How does design for social
behavior change affect the design
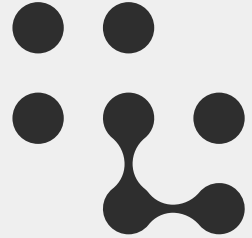of parking payment station? ▪

Project Intention

Design an inclusive on-street parking pay station for older adult users

The intention of our inclusive design of the parking pay station is to use our design skills and processes to improve the user experience of older adults.

Project Intention

Design an inclusive on-street parking pay station
for older adult users

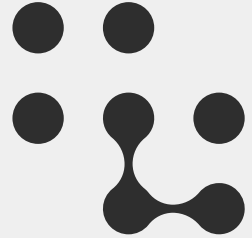Because intent of the designer is a significant influencing factor
of the balance between
- Intent of the stakeholder (older adult users and parking
  station managers)
- What the stakeholder wants and needs
- What values that the designer believes and how to
  achieve them

There might be conflicts between these three points during the
design process of the parking pay station.

(Gardiner & Niedderer, 2017)

Project Intention

Design an inclusive on-street parking pay station for older adult users

Therefore, it is important to reduce the conflicts between our intentions and the needs of users. There are two potential approaches to achieve this goal.
- Ask older adult users to participate in the designing process
- Make designers "become" the older adult users
 - Using tools to simulate capability loss

Project Process

Design an inclusive on-street parking pay station
for older adult users
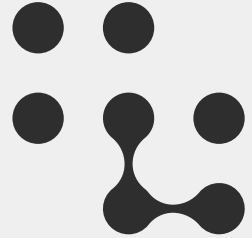
- To understand the needs, wants, and aspirations better,
  designers are encouraged to facilitate the relationship
  and interaction with older adult users.
- Older adult users could participate in the design process
  not only as an interviewee but also as a co-designer
  because they are the people with the best knowledge and
  experience of the issue.

(Gardiner & Niedderer, 2017)
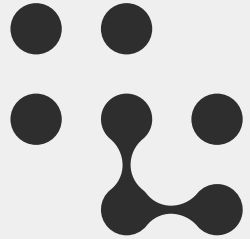
Project Process

Design an inclusive on-street parking pay station
for older adult users

How could we reduce the gap between designers and older adult users for our project?

- ask older adult drivers **what is the design they most want to appear in the parking pay station** instead of what part confuses them most when using the machine.
- ask **feedback of older adult drivers on the prototype** to understand if what we designed is really what they need.
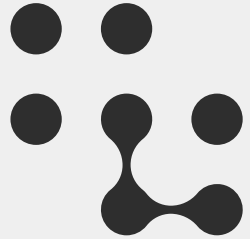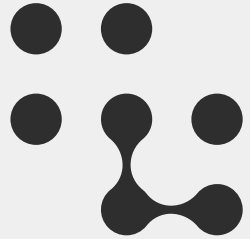
Project Outcome

Design an inclusive on-street parking pay station
for older adult users

The stimulation or
regulation of social
interaction can be the
main purpose of a
design, or it can be the
means by which to
enable another goal.

Purpose

Means

(Gardiner & Niedderer, 2017)

Project Outcome

Design an inclusive on-street parking pay station
for older adult users

The inclusive design of on-street parking pay station for older
adult users possibly will cause other outcomes. The outcomes
could be positive or negative.

- For example, the rate of older adult people who travel
  with cars could increase
- When focusing too much on designing for a specific
  demographic, other demographics could be impacted in a
  negative way
- New design challenges could arise with changes in the
  environment and surrounding technology

(Gardiner & Niedderer, 2017)

THANK YOU