

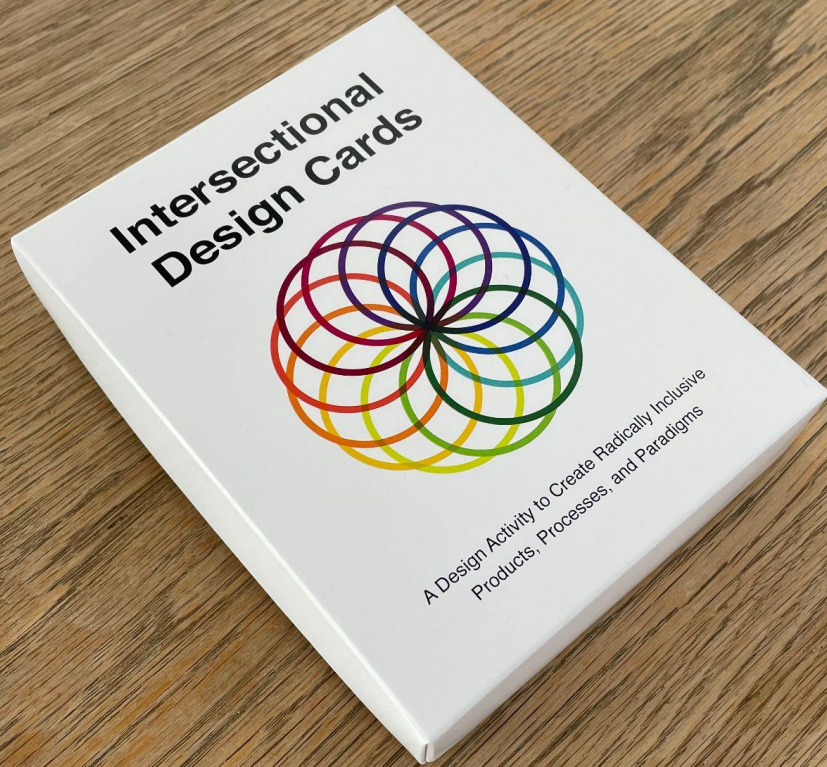
# Intersectional Design Cards



A Design Activity to Create Radically Inclusive  
Products, Processes, and Paradigms

# Intersectional Design Cards

Gendered Innovations  
Stanford University  
Published November 2021

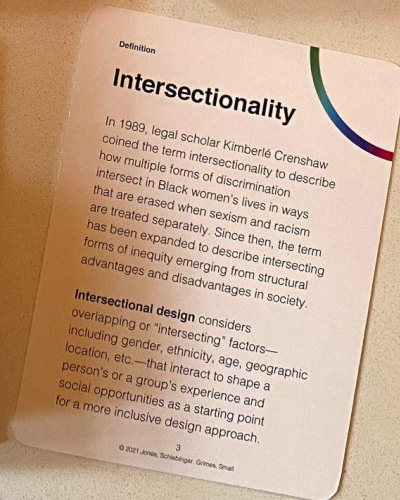
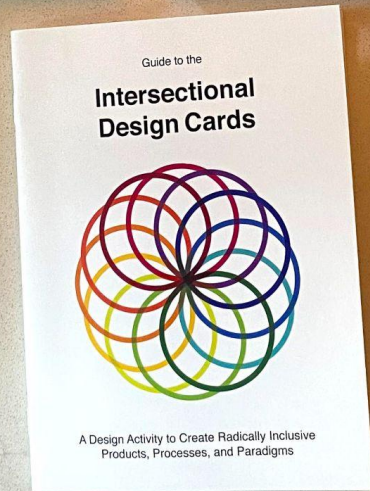
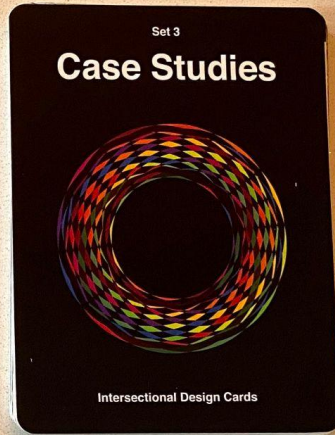
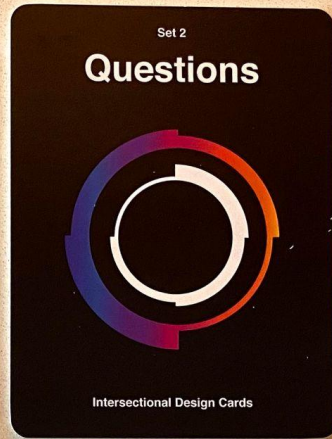
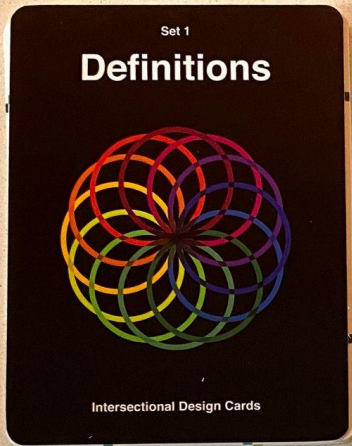


## Welcome to the Cards!

Our goal was to **create a toolkit** for design and engineering teams that is responsive to intersectional needs and perspectives.

The Intersectional Design Cards are designed to **help teams explore and develop intersectional design solutions.**





## Each deck includes:

- A Guide Booklet
- Set of 12 Intersectional Factor **Definition** Cards
- Set of 12 **Design Question** Cards
- Set of 16 **Case Study** Cards

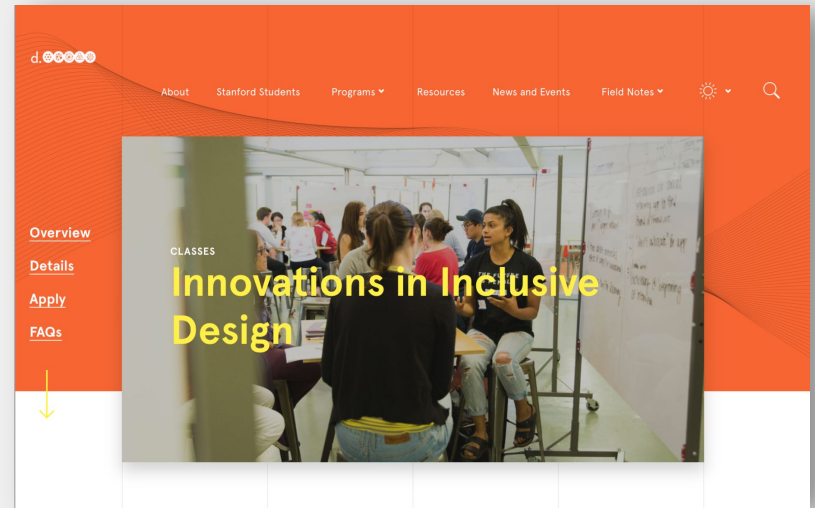
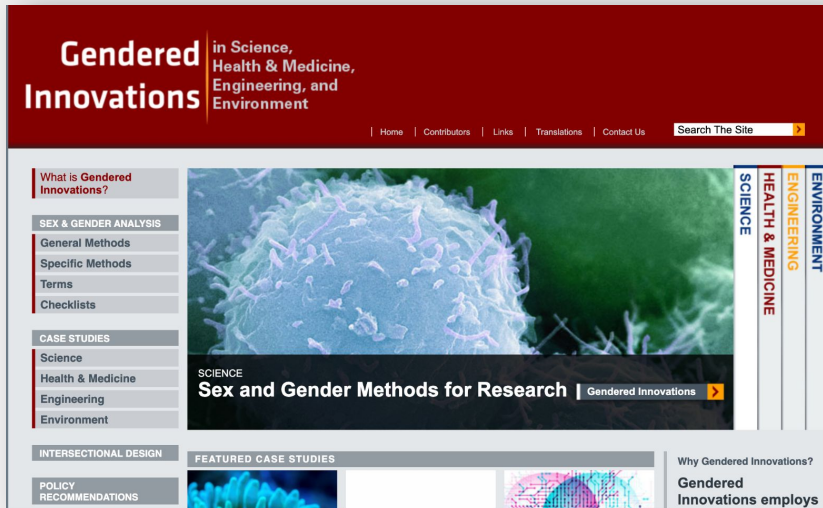
# Why use these cards?

The cards were designed to help people and teams:

- ✓ Navigate assumptions and biases to avoid designing to stereotypes.
- ✓ Integrate intersectional design thinking into your design work - from the beginning.
- ✓ Course correct.
- ✓ Identify new markets and business opportunities.
- ✓ Build an equitable, sustainable, and just society.







This work evolved out of an ongoing collaboration by an interdisciplinary team of researchers, designers, and practitioners, who conduct research, hold workshops, and teach classes at Stanford University's Hasso Plattner Institute of Design, the d.school.

# Prototyping

The cards were prototyped for over a year, and included feedback from fellow educators, students, and industry experts.



**Beyond Pink and Blue**  
Gender Inclusive Design Cards

**Intersectional Design Cards**  
A Design Activity to Create Radically Inclusive Products, Processes, and Organizations

*Case studies*  
 > design fails  
 > design expertise  
 > compound discrimination

*What is an intersecting factor?*  
 → from original full → include a gender factor  
 → intersection → include multiple social factors  
 → can make things more complex

**ACTIVITIES**  
 CONVERSATION  
 BRAINSTORM  
 CRITIQUE

*Review a case study activity*

*CRITIQUE your product w/ my questions*

*5 activities*

*48 cards*

*Business definitions*

*take cards out loads no. of cards.*

*write your level & select your questions*

**How might you use them?**

- To start a conversation
- To critique your product, process, and/or organization
- To brainstorm ideas

**The deck includes:**

- 6 Introduction Cards
- 6 Intersectional Factor Definition Cards
- 12 Design Question Cards
- 18 Case Study Cards

The cards are also available as user-interactive decks.

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**Gender inclusive means...**

**Thinking about sex:** Sex is about biological characteristics such as height, weight, phenotype, and anatomy.

**Thinking about gender:** Gender refers to cultural attitudes and behaviors that shape men and women's identities, gendered experiences, environments and knowledge. Gender may include sex, roles, (CIS) and gender fluid forms.

**Thinking about intersectionality:** Intersectionality is the overlapping of intersecting social categories such as ethnicity, age, socioeconomic status, sexual orientation and geographic location.

**thinking about sex**  
Paradigms and purpose

Does your product reinforce "one size fits all" or is it customized with respect to sex-specific biomechanics, anthropometrics, physiology, and, e.g. injury tolerance?

**Start Here**

These cards are designed to help teams explore, analyze, and invent inclusive design solutions.

**Step 1: Identify Your Goal**

There are three key activities to do with the cards:

1. **Start a conversation**
2. **Brainstorm** ideas
3. **Critique** your product, process, and/or organization

Decide which path you want to explore, and follow the instructions on the respective activity cards.

**Step 2: Set it up**

Organize the cards into 3 piles:

- Set 1: Definition Cards
- Set 2: Design Question Cards
- Set 3: Case Study Cards

*THUMBNAILS HERE*

*SUGGESTED NO. OF PLAYERS?*

*TIMING?*

**What are the design levels?**

*Inviting people to dwell in a complex diagram*

**Why use these cards?**

The goal of these cards is to help you create an inclusive design cycle.

**Designers** (define social norms)

**Products** (embody social norms that promote equality)

**Users** (define social norms)

**Cultures** (challenge social norms)

**Intersectional Design drives innovation while supporting social justice and environmental sustainability. It's about getting the design right for users across all of society—from the very beginning.**

The Intersectional Design Cards include:

- a Guide Booklet with directions and activities
- a set of **Intersectional Factor Definition** cards
- a set of **Design Question** cards
- a set of **Case Study** cards with intersectional factors

*"Turning shape academics' insights into actionable tools for business can be tricky, but the Intersectional Design Cards deck does this and more, simplifying understanding, ideas and brainstorming sessions. A genuinely fun way to explore intersectional design and go from just good products to great ones!"*

*Robin Goldstein, Stanford Advisor, 22-year Apple Veteran*

*"Clear to get start use thinking about intersectional design very early on in the innovation process. The tool for doing this right is much simpler before companies run into a solution that excludes large segments of potential markets."*

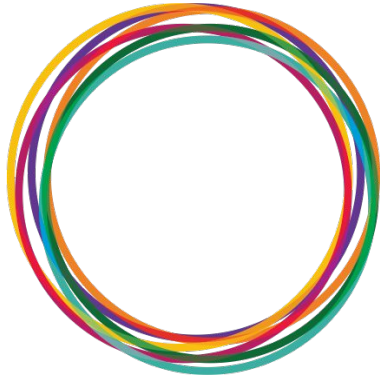
*Sophia Harrison, Winco's, Sweden's Innovation Agency*

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# Designed for use with designers and non-designers alike, the deck begins with a set of definitions:

What is **intersectionality**?



What is **design**?



What is **intersectional design**?





## Definition

# Intersectionality

In 1989, legal scholar Kimberlé Crenshaw coined the term intersectionality to describe how multiple forms of discrimination intersect in Black women's lives in ways that are erased when sexism and racism are treated separately. Since then, the term has been expanded to describe intersecting forms of inequity emerging from structural advantages and disadvantages in society.

**Intersectional design** considers overlapping or “intersecting” factors—including gender, ethnicity, age, geographic location, etc.—that interact to shape a person's or a group's experience and social opportunities as a starting point for a more inclusive design approach.



**Age**  
**Disability**  
**Educational Background**  
**Ethnicity**  
**Family Configuration**  
**Gender**  
**Geographic Location**  
**Race**  
**Sex**  
**Sexuality**  
**Social and Economic Status**  
**Sustainability**

## What are **intersectional design factors**?

Since 1989, intersectionality has broadened from gender and race, to describe multiple intersecting factors emerging from structural advantages and disadvantages in society. Intersecting factors may include age, social and economic status, educational background, geographical location, etc. that interact to shape a person's or a group's experience and social opportunities.


Our design case studies include—but are not limited to—the twelve intersecting factors, listed at left.

Other factors may include **appearance, language, political ideology, religion, immigration status, work background, Indigeneity, physical and mental health, and more.**

# Example of Intersectional Factor Definition Cards

Design Level 01

## Form & Function



Question 1

01 Form & Function

Question 1


### Who is the user?

Are you developing your product for a Black woman? An elderly man? A wealthy non-binary person? An LGBTQ+ individual in Sweden? An Asian child living in California?

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Design Level 02

## Experiences & Services



Question 1

02 Experiences & Services

Question 1


### Who has physical access to your experience/service?

Who does it leave out based upon physiology, age, primary sex differences (e.g., genitalia) or secondary sex differences (e.g., breasts)? Can people who are color-blind use it? What about the hearing impaired?

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Design Level 03

## Systems & Infrastructures



Question 1

03 Systems & Infrastructures

Question 1

### Who is at the design table? Who isn't?

Do you think that you are designing for everyone? If so, what aspects about this design are actually for you? Which aren't?


Who are the other stakeholders involved in producing your design (e.g., in your extended supply chain)?

Are you engaging future users in a process of co-creation and participatory design?

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Design Level 04

## Paradigms & Purpose



Question 1

04 Paradigms & Purpose

Question 1

### How might your design unintentionally reinforce existing social norms?

How might your design influence users? How might it impact a user's life conditions and opportunities? How might it free people from repetitive tasks and foster educational and work opportunities?

How might your product challenge stereotypes in ways that promote social and environmental justice?

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Set 1

# Definitions

Intersectional Design Cards

**Definition**

## Intersectionality

In 1989, legal scholar Kimberlé Crenshaw coined the term intersectionality to describe how multiple forms of discrimination intersect in Black women's lives in ways that are erased when sexism and racism are treated separately. Since then, the term has been expanded to describe intersecting forms of inequality emerging from structural advantages and disadvantages in society.

**Intersectional design** considers overlapping or "intersecting" factors—including gender, ethnicity, age, geographic location, etc.—that interact to shape a person's or a group's experience and social opportunities as a starting point for a more inclusive design approach.

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	Age	Disability	Educational Background	Ethnicity	mental health <small>Additional Intersectional Factor</small>
Family Configuration	Gender	Geographic Location	Race	indigenous knowledge <small>Additional Intersectional Factor</small>	
Sex	Sexuality	Social and Economic Status	Sustainability	immigration status <small>Additional Intersectional Factor</small>	

# Customization

The deck was created to **adapt**, with room for organizations and individuals to **add factors** that are relevant to their work.



## What is **intersectional design?**

Intersectional Design drives innovation while supporting social justice and environmental sustainability. It's about getting the design right for people across all of society—from the very beginning.



## 01 Form & Function

The look and feel of a design, its physical qualities and characteristics; and the impact of its materials and production on the environment.



## 02 Experiences & Services

User/customer experience, brand interaction, business models, strategies, and design decision-making.



## 03 Systems & Infrastructures

Systems thinking, sustainability, interdisciplinarity, networks, and databases.



## 04 Paradigms & Purpose

Conceptual frameworks, models, worldviews, major cultural themes, archetypes, ideologies, and mindsets.

# How do we define **design**?

Today, we recognize that design encompasses many different things. Take, for example, the smart phone. Design might mean the look and feel of the device in your hand; the experience of video chatting or using a virtual assistant; the network of hardware and software that the device connects to; and/or the cultural trends that emerge through using the device in new and unforeseen ways.

Questions Index	
<input type="radio"/>	<b>01 Form &amp; Function</b> 1. Who is the user? 2. How might your product be made customizable? 3. In what ways are you mindful of the environmental impact of the materials and production methods used in your product?
<input type="radio"/>	<b>02 Experiences &amp; Services</b> 1. Who has physical access to your experience/service? 2. If your design provides a service, could it result in any unintended discrimination? 3. Who might be marginalized within your target demographic?
<input type="radio"/>	<b>03 Systems &amp; Infrastructures</b> 1. Who is at the design table? Who isn't? 2. What larger systems or infrastructures does your product or service belong to? 3. How will your design change as social or environmental relations change in the coming years?
<input type="radio"/>	<b>04 Paradigms &amp; Purpose</b> 1. How might your design unintentionally reinforce existing social norms? 2. Where does your product or service succeed across inter-cultural borders? 3. What kind of future worlds would you like to see your design working within?
19 <small>© 2021 James Schabinger, Givens, Grant</small>	

## Question Index Card

There are 4 question cards pertaining to each level.



## Gender

Intersectional Factor

### Gender

Refers to cultural attitudes and behaviors that shape products, technologies, environments, and knowledge—and includes: gender norms, gender identity, and gender relations.

Gender is multi-dimensional and may include women, men, transgender, genderqueer, gender-diverse individuals, non-binary, etc.

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## Race

Intersectional Factor

### Race

Racial attributes, such as skin tone, may be important to design for developing technologies; e.g., facial recognition or infrared sensors may perform differently on different skin tones. In the U.S., the term race is used. However, terminology may differ across countries.

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## Disability

Intersectional Factor

### Disability

Refers to different physical or neural divergent conditions that relate to movement, sense, or activities. Disabilities may impact how people interact with a product or service. Some may be visually impaired; others may have limited mobility or dexterity.

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## Sustainability

Intersectional Factor

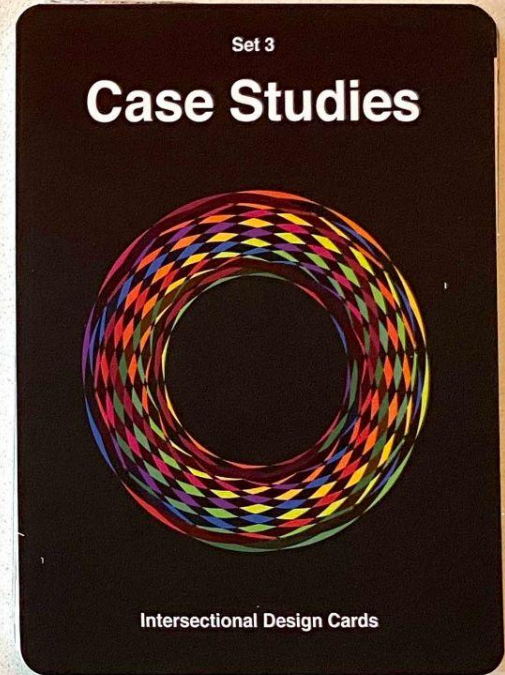
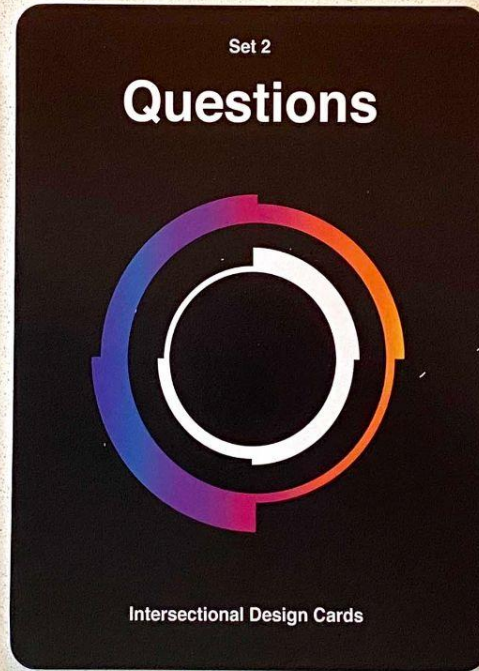
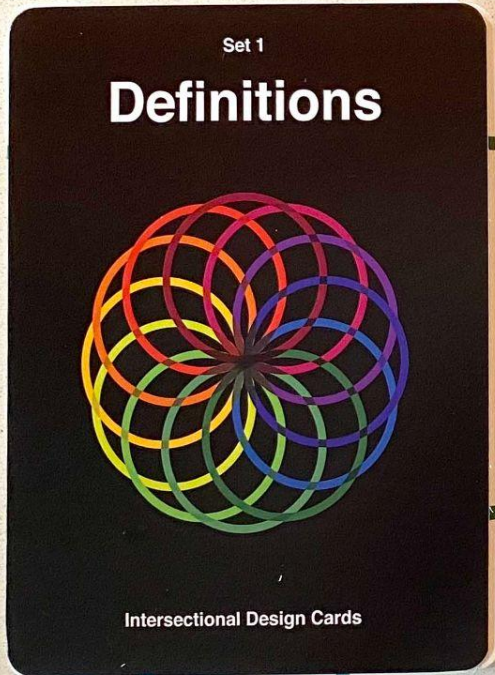
### Sustainability

Refers to environmentally responsible design that meets the needs of the present without compromising future generations. One sustainable design approach is Life-Cycle Assessment (LCA), a methodology for assessing environmental impacts associated with all stages of the life cycle of a product, process, or service.

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# Example of Question Cards

The deck is organized into three sets:





# 01 Form & Function

## 01 Form & Function

Question 2

### How might your product be made customizable?

For example, how might you address sex-specific biomechanics, anthropometrics, physiology, and physical strength? Or skin tones, in facial recognition, for example? Are you considering how strength and dexterity differs for young people and elderly people?

## Form & Function Case Study 1.3

### Pulse Oximeter

Key Intersecting Factors: **Race, Sex**



...n't work for people with darker skin. Near-infrared technology does not ...d, close the circuit, and dispense the ...y, heart-rate monitors, even Fitbits, ...r skinned people, which may put ...us conditions like heart disease. ...s, used to measure oxygen levels ...timate oxygen levels in the blood in ...skin, putting them at risk for organ ...tal oxygen is not provided.

...be also inaccurate for women, ...tically smaller and geometrically ...i. Black women may experience the



# 02 Experiences & Services

## 02 Experiences & Services

Question 3

### Who might be marginalized within your target demographic?

Have you considered intersecting factors that may reveal sub-group differences between people that would otherwise have been obscured? The elderly? The disabled? Men? Women? Cis? Trans? How might you design experiences and services for them?

## Virtual Assistants

Key Intersecting Factors: **Gender**, **Ethnicity**, **Sexuality**



ve primarily been gendered as negative stereotypes of female a group of Danish researchers elop "Q," the first genderless ase powering the voice was binning strands of gender-fluid d reached a genderless range that as to categorize as either female designers hope to add a viable on for voicing virtual assistants.

/oice Assistants to avoid bias, they smething about users' gender, age, c location, etc. Black English and ang, for example, may be filtered out ned to detect rudeness and

# 03 Systems & Infrastructures

## 03 Systems & Infrastructures

Question 3

**How might your design change as social or environmental relations change in the coming years?**

For example, in which ways might your design assume a traditional division of labor? How are you taking into account climate change challenges?

## Transportation Planning

Key Intersecting Factors: **Family Configuration,**  
**Gender**



port caregivers? Transportations  
ta by journey purpose to plan  
ditional data categories include,  
yment, education, and shopping.  
gories capture carework—caring for  
, and households—even though,  
arately, “care-related trips,” become  
category by trip purpose.

nt? Caregivers tend to make  
multiple, short trips that are grouped  
n one long commute trip. Taking  
caregivers’ travel patterns allows  
neers to design systems that work  
roader segments of the population.

# 04 Paradigms & Purpose

## 04 Paradigms & Purpose

Question 3

### What kind of future worlds would you like to see your design working within?

For example, how might your design fit into a genderless world? An intergenerational world? A socially just world? Which will your product, service and/or organization foster?

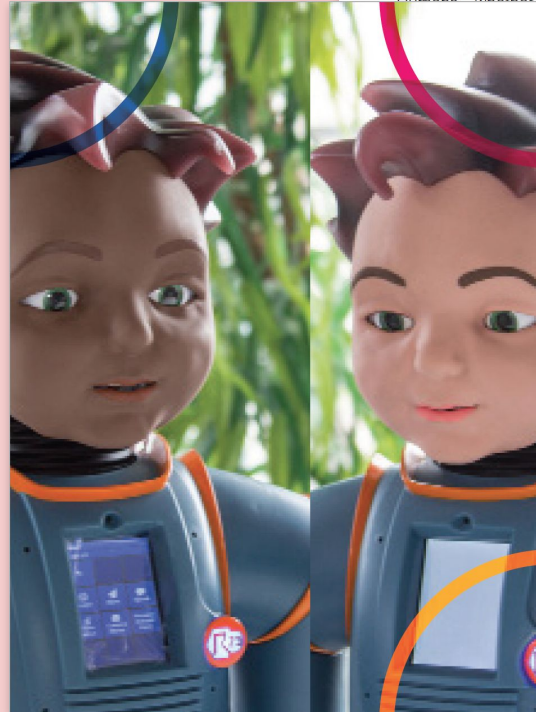
## Social Robots

Key Intersecting Factors: **Disability**, **Gender**, **Race**

Humans—whether as designers or users—tend to think about gender in binary terms, and, consequently, gender machines are designed in a world alive with binary gender identities, and gender

But that, even though robots are designed to resemble a boy because there are more boys than girls. It is not surprising that a robot designed for the millions of girls with autism (ASD)—comes in a variety of skin tones and eye colors. Design options might enhance human/

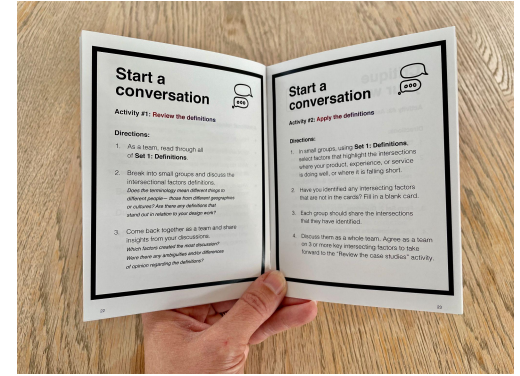
designed to resemble a boy because there are more boys than girls. It is not surprising that a robot designed for the millions of girls with autism (ASD)—comes in a variety of skin tones and eye colors. Design options might enhance human/






# We purposefully designed the deck to be used in multiple ways.

Each person or team may have a different goal for using the deck.  
To get you started, we suggest **three ways to use the cards**:



## Start a conversation




**Activity #1: Definition review**

**Directions:**

1. As a team, read through all of **Set 1: Definitions**.
2. Break into small groups and discuss the intersectional factors definitions.  
*Does the terminology mean different things to different people, e.g., from different geographies or cultures? Are there any definitions that stand out in relation to your design work?*
3. Come back together as a team and share insights from your discussions.  
*Which factors created the most discussion? Were there any ambiguities and/or differences of opinion regarding the definitions?*

20 Intersectional Design Cards

## Brainstorm ideas




**Activity #5: Creative Combination**

**Directions:**

1. Using **Set 1: Definitions**, randomly select 2 intersectional factors cards (E.g. Family Configuration + Sustainability)
2. Creatively combine the cards and brainstorm design ideas at the intersection. (E.g. An intergenerational waste management system - for students and aging population living in co-housing/ a recycling calendar that acts as a learning opportunity for grandparents and grandchildren.)
3. Record your intersectional design ideas on post-its.
4. Dig deeper. Did you find new solutions?

Guide 31

## Critique your work



**Activity #3: Critique questions**

**Directions:**

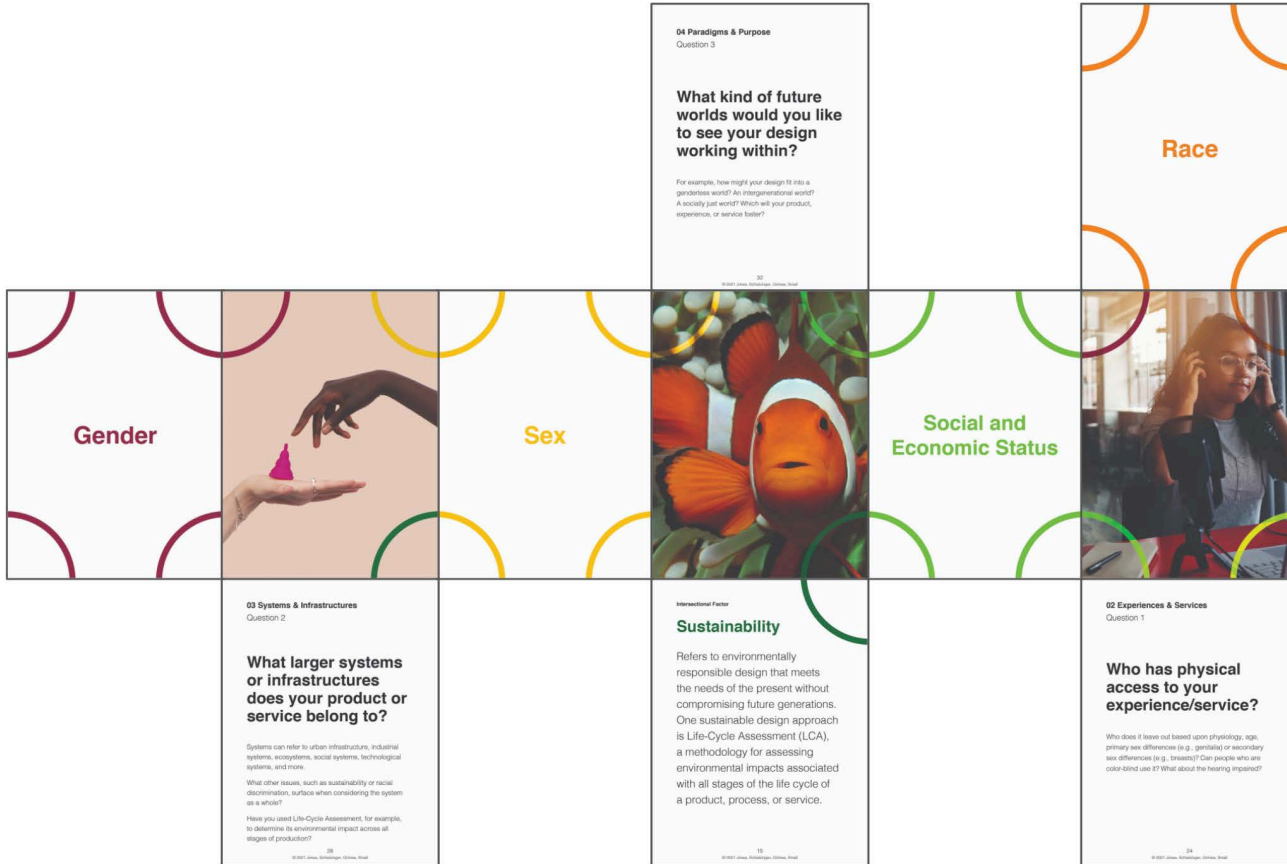
1. Take out **Set 2: Questions**.
2. In small groups, read out the design levels card. Select a design level to explore in relation to your design work (e.g., Form & Function, Experiences & Services, Systems & Infrastructures, or Paradigms & Purpose).
3. From **Set 2: Questions**, draw out the 3 questions relating to the level/s you chose.
4. Use the questions to critique your design work. Select a scribe to capture the responses.

**Note**

*You might identify your design work as located at one distinct level - e.g. "we are designing a service that connects patients with speech therapists, so we identified with 'Experiences & Services.'"*

*Or, you might consider your design work as relating to more than one level - e.g. "we are designing an eco-friendly menstrual cup, where materials and production and Life Cycle Analysis are intimately connected, so we identified with both 'Form & Function' and 'Systems & Infrastructure.'"*

28 Intersectional Design Cards 29



The cards are designed to visually connect with one another.

Teams can visualize the intersections between factors and answer questions pertaining to their products and services—or practice by analyzing the case studies.



Workshops with the Innovations in Inclusive Design d.school class

## Cards in Action

The cards, published in November 2021 and distributed by Stanford University Press, have been prototyped with students and start-up teams, presented at several conferences, and reviewed by industry professionals and academics.

Future workshops are planned with the Green Library at Stanford as well as several Silicon Valley tech companies.

Workshop with Vinnova, the Swedish Innovation Agency





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Intersectional Design

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## Intersectional Design Cards

These cards are designed to help teams explore and develop intersectional design solutions.

**WHY?**


- Navigate assumptions and biases
- Integrate intersectional thinking into your product
- Course correct
- Identify new markets and business opportunities
- Build an equitable, sustainable, and just society

**HOW?**

- To start a conversation
- To critique your product, experience, or service
- To brainstorm ideas

**WHAT?**

- Guide Booklet
- Intersectional factors cards
- Question cards
- Case study cards



ENTER the digital experience

DOWNLOAD the guide booklet

BUY the cards

## Free Access Online

In addition to the physical deck, all of the case studies and questions are available online for free in order to reach as many people, organizations, and institutions as possible.

Accompanying website and digital version of the cards: <https://intersectionaldesign.com/>

**Thank you, Core77!**

