

## Module 3: Inclusive, Plural, and More-than-Human Design

### Overview

This module focuses on who and what design includes. Students examine how design can serve some users while excluding others, and how sustainable design must consider diverse human communities as well as non-human actors such as animals, plants, ecosystems, rivers, air, soil, and climate.

The central idea of this module is **expanded stakeholder thinking**. Sustainable design cannot focus only on a single ideal user. It must consider different bodies, cultures, abilities, incomes, identities, communities, species, and environments.

Students will use inclusive and more-than-human perspectives to challenge narrow assumptions about who design is for and what counts as value.

**Key SDG links:** SDG 3, SDG 10, SDG 11, SDG 12, SDG 15, SDG 16

### Learning Objectives

By the end of this module, students should be able to:

- Explain why sustainable design must consider diverse human and non-human stakeholders.
- Apply inclusive or more-than-human thinking to analyse a design problem.
- Identify forms of exclusion, harm, or neglect built into a design.
- Propose a design direction that creates broader social, ecological, or democratic value.

### Required Academic Reading

Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. MIT Press.

**Required excerpt:** Chapter 3, “Design as Critique,” pp. 33–46.

**Reading focus:** As you read, focus on how design can ask questions rather than only solve problems. Dunne and Raby are useful here because they help students imagine alternative futures and question what current design systems take for granted.

### Pre-class Activity: Who or What Is Missing?

Choose one design situation where some users, communities, or ecological actors may be overlooked.

Examples:

- public seating
- campus wayfinding

- a mobile banking app
- a healthcare waiting room
- food delivery packaging
- an urban park
- a tourism information sign
- a children's learning space
- a shared kitchen
- a public toilet
- a street crossing
- a housing interior
- a product designed for "average" users
- an outdoor advertising display
- a riverside public space

Write **200–250 words** responding to the prompt:

**Who or what is missing from this design?**

Include:

- the design situation
- who the design seems to prioritise
- who or what it may overlook
- one social or ecological consequence
- one idea from Dunne and Raby
- one SDG connected to the issue

**In-class Activity 1: Expanded Stakeholder Scan**

**Goal:** Help students move beyond the "average user."

Groups analyse one design situation and identify stakeholders across three categories.

**Human stakeholders:**

- primary users
- non-users affected by the design
- workers or maintainers
- people with disabilities
- children or elderly users
- low-income users
- local communities
- people from different cultural backgrounds

**System stakeholders:**

- service providers
- manufacturers
- repairers
- waste handlers
- policymakers
- educators
- landlords or facility managers
- platform owners

**More-than-human stakeholders:**

- animals
- plants
- soil
- water
- air
- energy systems
- climate
- local ecosystems
- future generations

**Students identify:**

- who benefits most from the current design
- who is excluded or burdened
- which non-human actors are affected
- what value the design currently prioritises
- what value it should prioritise instead

**Output:** An Expanded Stakeholder Statement:

**“This design currently prioritises \_\_\_\_\_. It overlooks \_\_\_\_\_. A more sustainable design would need to consider \_\_\_\_\_.”**

**In-class Activity 2: Alternative Futures Scenario**

**Goal:** Help students use speculative thinking to imagine design alternatives.

Groups create a short scenario set five to ten years in the future.

Their scenario should answer:

- What has changed about the design situation?
- Who or what is now included?
- What new behaviour does the design encourage?
- What sustainability problem does it address?
- What new tension or risk might appear?

Possible future directions:

- a public space designed for elderly users and urban biodiversity
- packaging designed for reuse by local businesses
- a campus app that supports accessibility and low-energy choices
- furniture designed for repair, sharing, and long-term use
- a wayfinding system that reduces crowding and protects sensitive areas
- a restaurant interior designed around food waste reduction
- a neighbourhood service that supports care, repair, and reuse
- a product designed with animals, plants, or water systems in mind

**Output:** A short Alternative Futures Concept with a title, scenario description, stakeholders included, sustainability issue addressed, and one possible unintended consequence.

### In-class Activity 3: Broader Value Design Direction

**Goal:** Help students propose a design direction that creates broader social, ecological, or democratic value.

Working in groups, choose one design situation from your pre-class work.

Your task is to propose one design direction that creates broader value. The design direction does not need to be a finished product or complete solution. It should show how the design could move beyond serving only the most obvious user and instead support wider social, ecological, or democratic outcomes.

Your design direction should create at least **one** of the following forms of value:

- **social value:** improves access, dignity, safety, care, inclusion, or everyday wellbeing
- **ecological value:** reduces harm to ecosystems, materials, animals, plants, water, air, or climate
- **democratic value:** gives more people voice, choice, participation, visibility, or control over how the design works

Your group should answer the following questions:

- What is the current design situation?
- Who or what does the current design prioritise?
- Who or what is overlooked, excluded, or burdened?

- What kind of broader value do you want to create: social, ecological, democratic, or a combination?
- What is your proposed design direction?
- How would the design change in form, function, service, communication, access, material, or governance?
- Which stakeholders would need to be involved?
- Which human and more-than-human stakeholders would benefit?
- What new trade-off, tension, or unintended consequence might appear?
- How would you know whether the design direction is creating broader value?

Your proposal should avoid vague claims such as “make it inclusive,” “make it sustainable,” or “help the community.” You need to explain what would actually change and who or what would benefit.

**Output:** Create a short **Broader Value Design Direction** with the following structure:

1. **Current design situation:** What are you analysing?
2. **Current priority:** Who or what does the design mainly serve now?
3. **Missing stakeholders:** Who or what is overlooked?
4. **Value focus:** Is your direction creating social, ecological, democratic value, or a combination?
5. **Design direction:** What would change?
6. **Stakeholders involved:** Who needs to participate or support the change?
7. **Sustainability benefit:** What harm is reduced or what value is created?
8. **Trade-off:** What might become harder, more expensive, slower, or more contested?
9. **Success measure:** What would you monitor or observe?

**Example:**

A public park currently prioritises open visual space and low-maintenance landscaping. A broader value design direction could redesign part of the park as a shaded, biodiverse seating and gathering area with native plants, accessible paths, quiet zones, and community notice points. This creates social value by supporting elderly users, children, and people needing rest; ecological value by supporting insects, birds, shade, and soil health; and democratic value by giving residents space to gather and share information. The trade-off is that the park may require more maintenance, community consultation, and protection from overuse.

**Post-class Reflection**

Respond to the prompt:

**“How does design change when we stop designing only for the average human user?”**

Include:

- one overlooked stakeholder
- one more-than-human actor

- one idea from Dunne and Raby
- one risk or limitation of speculative design
- one way inclusive thinking could improve sustainability