RETHINKING WAYFINDING
THROUGH INCLUSIVE DESIGN
A CASE STUDY WITH VISUALLY IMPAIRED USERS

253 MIL
VISUALLY IMPAIRED
PEOPLE IN THE WORLD

50%
BLIND PEOPLE RELIED
ON BRAILLE IN 1960

8.2%
BLIND PEOPLE RELY
ON BRAILLE IN 2018

How can designers apply inclusive design principles to improve current and future wayfinding systems?

MY STORY

I was born with a rare eye condition called Anaridia. This means the iris in my eyes never fully developed. Due to this condition I am visually impaired. When I was in elementary school my doctor thought I would be fully blind before I became an adult. To prepare for this, I was taught braille from kindergarten through high school. In addition, I had orientation and mobility lessons where I was taught how to get around with low vision. I have been fortunate to only have slight vision loss but because of my experiences I have a genuine passion to help those in the visually impaired community. Being able to navigate new public spaces can be difficult and especially challenging for visually impaired individuals. I will apply my findings to improve wayfinding systems for a wider audience.

DEFINITIONS

INCLUSIVE DESIGN: A methodology that enables and draws on the full range of human diversity. Most importantly, this means including and learning from people with a range of perspectives. While practicing inclusive design should make a design more accessible, it's not a process for meeting all accessibility standards (Holmes, 2018).

VISUAL IMPAIRMENT: Best-corrected [with glasses or contacts] visual acuity in the better-seeing eye ranging from moderate visual impairment of 20/70 to severe visual impairment [or legally blind] of 20/200 and total blindness at 20/400 (WHO, n.d.). According to these definitions, there is an estimated 217 million people are who are moderately to severely visually impaired and 36 million people who are blind (Bourne et al., 2017).

WAYFINDING: The process of arriving to a chosen destination regardless of it being in a common or uncommon surrounding. Wayfinding is also the ability to solve problems when barriers or obstacles get in the way and the ability to make decisions when there is more than one route available (Arthur and Passini, 1992).
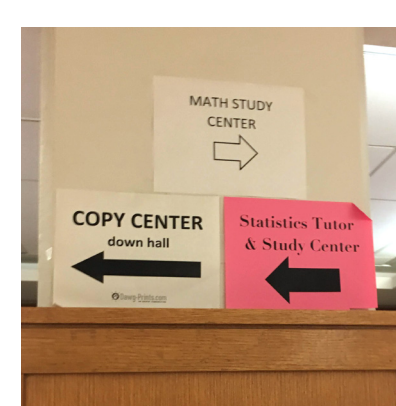
RESEARCH

I walked around public buildings to learn about existing wayfinding systems. Below are some common patterns I found.

Maps and signage are visually reliant.

Multiple visual identities are present.

People are creating their own signs.

Duplicate information on signage.

Unusual placement of signage or maps.

A lack of proper lighting for signage.

A lot of surrounding visual noise.

WI/SP 2019

POSSIBLE DESIGN OUTCOMES

Redesign signage and maps for an existing wayfinding system on the UW campus.

Create a working prototype for a wearable device to help with navigating buildings.

Design a toolkit to help other designers to create inclusive wayfinding systems.

Work with an outside client to create a wayfinding system using inclusive design.

Create a series of prototypes which use different senses for wayfinding systems.

FLOOR

ANGELA PICCOLO
EMAIL: APICCOLO@UW.EDU
MDES CANDIDATE, 2018

COMMITTEE MEMBERS
CHRISTOPHER OZUBKO
DOMINIC MUREN

WORKS CITED: The Americans With Disabilities Act of 1990 // Senses: Design Beyond Vision by Ellen Lupton and Andrea Lipps // Mismatch: How Inclusion Shapes Design by Kat Holmes // Rethinking ADA Signage Standards for Low-Vision Accessibility by Aries Arditi // WHO | Vision Impairment and Blindness // Wayfinding: People, Signs, And Architecture by P. Arthur and R. Passini