

leaves falling
make roads slick

Heidi Biggs, biggsh@uw.edu
Advisor: Audrey Desjardins, UW Design
Committee: Jason Germany, UW Design;
Guillaume Mauger, UW Climate Impacts Group

FEELING CLIMATE CHANGE

hat for
rain + cold

glasses
for dust +

scarf for
wind

chilly, de-humidified
air, crisp

Speculative tools to tangibly understand climate change for the everyday cyclist.

CLIMATE CHANGE: HARD TO CONTEXTUALIZE

Climate change presents a paradox: while it has transpired and is transpiring, due to its generational time-scale and the natural variability of weather, it simultaneously feels intangibly distant. While this may be the case, I seek to leverage the latent knowledge of weather, seasons and climate held by Seattle's cyclists to create speculative tools for making climate change more personal, 'real' and tangible.

SEATTLE'S CYCLISTS UNDERSTAND LOCAL WEATHER AND CLIMATE

From slippery leaves, drizzly winter days, hot dry summers, smoke from fires, to the chills in the air that signal fall is on the horizon, cyclists know about the weather, seasons and climate in Seattle.

IMPACT THROUGH TANGIBLE UNDERSTANDING

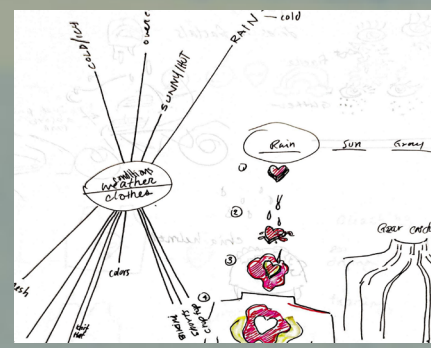
Hopefully, by giving people more personal, tangible insights in to the nature of climate change, a phenomena heretofore mediated for them by science and the news, they will feel more part of their local climate and ecosystem, aware of climate change, and agentially inclined to act.

BUT CYCLISTS AREN'T SURE THEY ARE EXPERIENCING CLIMATE CHANGE.

While they have hunches that increased rainfall, hotter summers, and worse air quality relates to climate change, cyclists aren't confident climate change is totally to blame. Due to variability in weather and becoming more experienced at dressing for the weather, many riders express that, "It's hard to put a finger on it" when discussing climate change.

RESEARCH METHODS

1



AUTOBIOGRAPHICAL DESIGN

Through a series of autobiographical experiments, I explored relationships between gear, weather and the built environment. Through this I developed an interest in the relationships between cycling gear, weather and climate change.

2



SEMI-STRUCTURED INTERVIEWS

With a general understanding of climate change established, I interviewed 6 Seattle bike commuters to about how their cycling practices relate to the weather and seasons and their attitudes about climate change.

3



PROBE STUDY

After interviewing cyclists, I built a probe to gather more open-ended, imaginative and speculative responses from participants to inspire future design outcomes. The probe had 3 pieces, a route-by-season map exercise, a booklet exploring relationships between cycling gear, weather and climate change, and a set of speculative sensors designed to discover what participants would like to know about climate change.

COMPLEXITY + AMBIGUITY

insight: Cyclists are worried extreme and variable weather will make cycling practices more complex.

theme: Climate change is seen tragically at a global level, but described ambiguously and tentatively a local level.

Layers:
midweight
sweater with
a raincoat pocket.



"I'd like to say I think [I notice trends in the weather] ... nothing so drastic that I can put my finger on it"
-Micah on noticing trends

gloves for
cold/wet
riding



"If I have to carry any more gear, I might stop riding entirely"
-Mark, Gabbing Gear



"This sensor would sense acidity of rain to tell me if my bike components were degrading faster."
-Dan, Strange Sensors



"More variable weather creates interesting riding conditions, I've seen more double rainbows in the last two years than ever before."
-Daria on variable weather

disc brakes
for rain

WEIRD GEAR FOR WILD WEATHER.

Opportunity to reflect the varied and ambiguous/amoral outcomes of climate change in ways that address cyclist's concerns about increasingly complex cycling practices. For example, maybe a mechatronic jacket designed to change shape for different types of weather starts to have anxiety.

SYMBOLIC DECAY / MATERIAL HISTORIES

Opportunity to make generational time-frames tangible through material traces or symbolic decay. Could outerwear weather in a way that visualizes the impact of climate change over time? Or can gear reflect a history of use, repair or decay specific to climate change?

AIR QUALITY + ECOLOGY IMMERSION

insight: Cyclists are concerned about decreasing air quality.

theme: Cyclists are aware of and sometimes experientially dissolve into the surrounding ecology.



"I got a mask last summer, it's hard to breathe in but I feel a lot better."
-Annie on summer smoke



"I had a really surreal experience where a group of ducks flew really low and included me in their flying-v formation"
-Micah on becoming a duck

AIR QUALITY & POST-ANTHROPOCENTRISM

Opportunity to explore intersections of air quality and human-non-human interactions. Perhaps a design explores a diegetic prototype from a future where a counter-culture group of cyclists conduct street-level sensing to seek out 'good air' oases which they protect and cultivate.

fender:
winter
must-hav