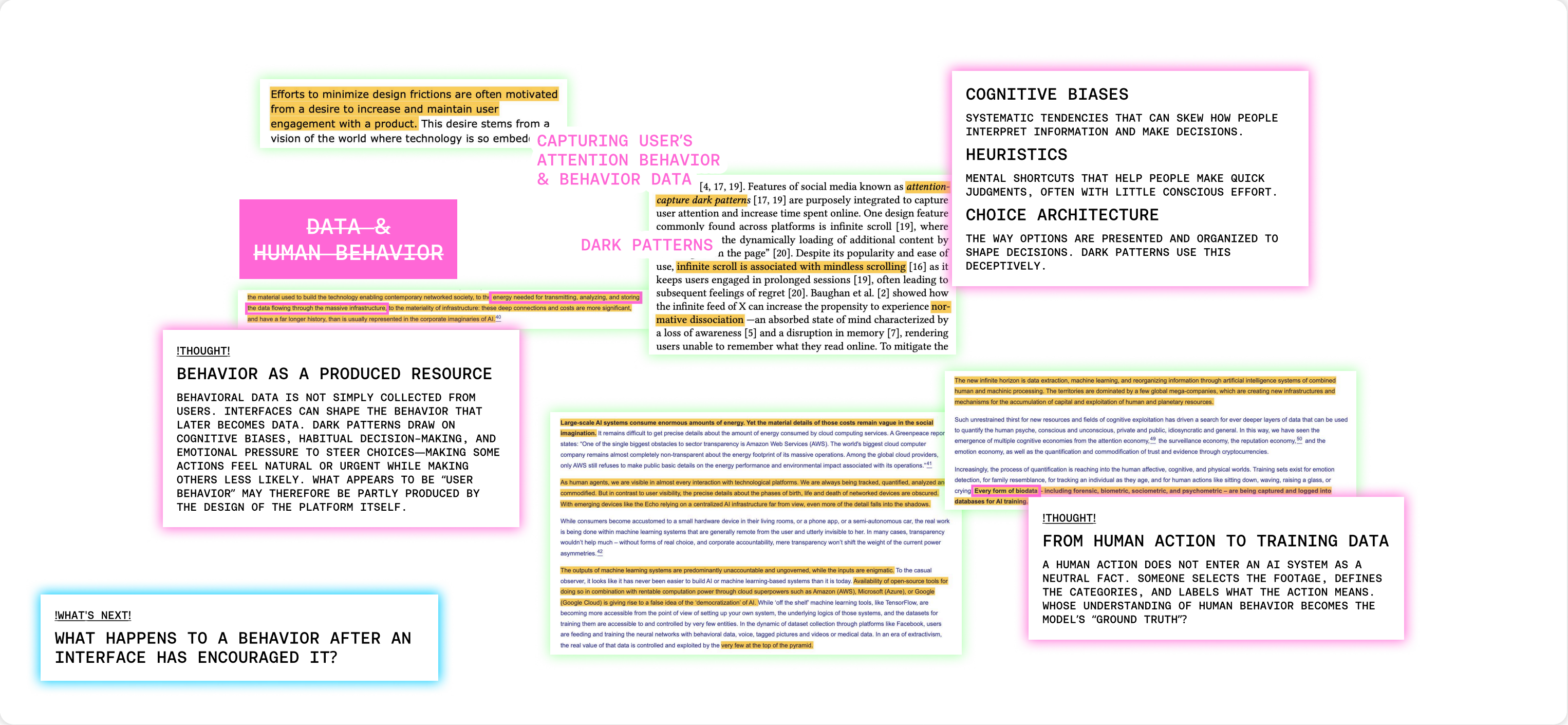


I began by questioning whether comfortable and seamless digital experiences should always be considered good design.

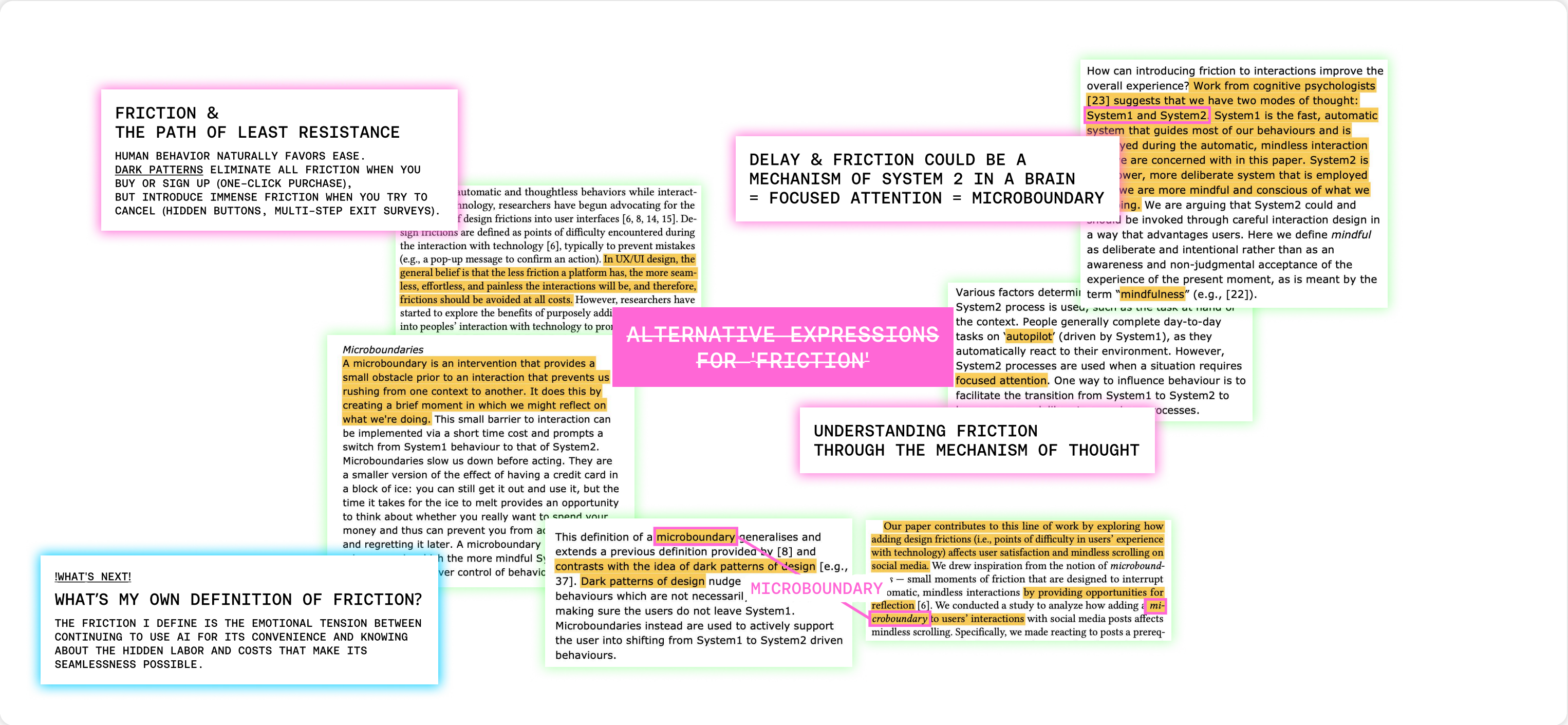
Infinite scroll, autoplay, recommendation algorithms, and instant responses provide convenience, but they also ENCOURAGE USERS TO CONTINUE INTERACTING WITHOUT PAUSE. They can also CONCEAL THE DATA, ALGORITHMS, AND ECONOMIC STRUCTURES that make these experiences possible.

Initially, I understood FRICTION as a FUNCTIONAL DESIGN INTERVENTION that could interrupt automatic behavior.



1. DATA AND HUMAN BEHAVIOR

USER BEHAVIOR IS NOT SIMPLY COLLECTED. IT CAN BE GUIDED BY INTERFACE STRUCTURES AND TRANSFORMED INTO DATA AND AN ECONOMIC RESOURCE.



2. MECHANISMS OF FRICTION

THROUGH SYSTEM 1 AND SYSTEM 2, COGNITIVE BIASES, AND MICROBOUNDARY, I EXAMINED HOW FRICTION CAN INTERRUPT AUTOMATIC BEHAVIOR AND CREATE ATTENTION AND REFLECTION.

3. HIDDEN BEHIND SMOOTHNESS

BEHIND SEAMLESS DIGITAL EXPERIENCES ARE DATA PROCESSING, HUMAN LABOR, SERVERS, ENERGY, AND MATERIAL INFRASTRUCTURE, BUT THESE PROCESSES REMAIN LARGELY INVISIBLE TO USERS.

I developed 7 inquiries to investigate smoothness from different perspectives.

- 1.DOES SMOOTHNESS ELIMINATE FRICTION, OR DOES IT SHIFT IT ELSEWHERE?
- 2.HOW DOES THE SPEED OF DIGITAL ENVIRONMENTS CHANGE THE WAY WE THINK AND EXPERIENCE TIME?
- 3.IF DATA COLLECTION PROCESSES BECAME VISIBLE, WOULD USERS' AWARENESS AND CHOICES CHANGE?
- 4.CAN CAREFULLY DESIGNED DIFFICULTY LEAD USERS TO DEEPER UNDERSTANDING AND REFLECTION?
- 5.HOW IS A FAST AND CONVENIENT EXPERIENCE CONNECTED TO LABOR AND ENVIRONMENTAL BURDENS ELSEWHERE?
- 6.DOES THE IMMATERIAL APPEARANCE OF DIGITAL SERVICES MAKE THEIR ENVIRONMENTAL COSTS HARDER TO RECOGNIZE?
- 7.HOW WOULD THE EXPERIENCE CHANGE IF USERS FELT THAT THE INTERFACE WAS OBSERVING THEM?

Although the questions began in different directions,
they became connected through the relationship between SMOOTHNESS & VISIBILITY.

PROTOTYPE 1 — YOUTUBE Q&A

I used a series of questions to trace what might be happening behind the familiar experience of watching YouTube.

DISCOVERY

I was not completely unaware of the system. I had simply never stopped to think about it while using the platform.



PROTOTYPE 2 — INSTAGRAM SESSION RECEIPT

I transformed a 4min and 27sec Instagram session into a receipt of behavioral data.

DISCOVERY

A session that felt brief and effortless contained many actions, data points, and advertising exposures.

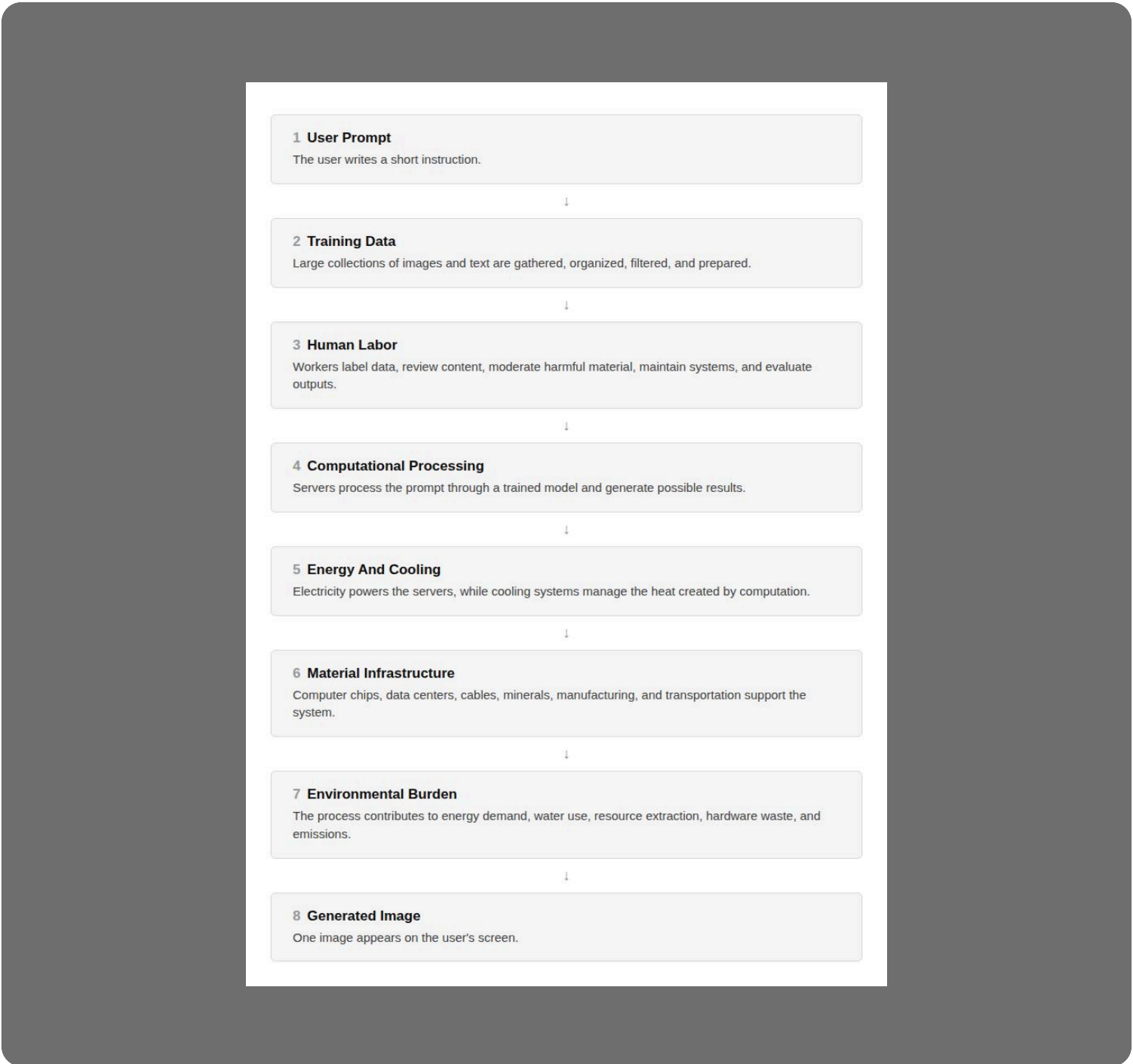


PROTOTYPE 3 — BEHIND THE PROMPT

I connected the immediate result of an AI prompt to the data, human labor, servers, energy use, and environmental processes behind it.

DISCOVERY

Friction that appears to have been removed from the user’s experience may be transferred to other workers, places, and environments.



Through the prototypes,
I discovered that smoothness provides users with fast and convenient experiences while CONCEALING THE LABOR AND INFRASTRUCTURE that make them possible.

- DATA COLLECTION AND PROCESSING
- DATA LABELING AND CONTENT MODERATION
- SERVER AND DATA-CENTER OPERATIONS
- ENERGY AND WATER CONSUMPTION
- MINERAL EXTRACTION AND DEVICE PRODUCTION
- TIME, RISK, AND DIFFICULTY EXPERIENCED BY OTHER WORKERS AND COMMUNITIES

Smoothness does not eliminate friction. It may REDISTRIBUTE FRICTION TO PEOPLE, PLACES, AND SYSTEMS THAT REMAIN INVISIBLE TO THE USER

Initial Focus: Friction as a FUNCTIONAL INTERVENTION placed directly within an interface.

FUNCTIONAL FRICTION

- Making the user wait
- Adding additional steps
- Slowing down an interaction
- Displaying warning messages
- Interrupting automatic behavior

Emerging Direction: Friction as an EMOTIONAL TENSION that may emerge after the hidden conditions behind a seamless experience become visible.

EMOTIONAL FRICTION

/ MECHANISM

- Awareness of hidden processes
- Tension btw convenience & hidden conditions
- Recognition of contradiction

/ POSSIBLE RESPONSES

- Discomfort or uneasiness
- Responsibility or guilt
- Helplessness or indifference

MY POSITION



WHAT THIS PERSPECTIVE MADE VISIBLE

I believe creative work should make the familiar unfamiliar and question what we take for granted.

This led me to look beyond convenience toward what makes smoothness possible.

Hidden conditions

DATA, LABOR, AND INFRASTRUCTURE BEHIND SMOOTHNESS.

Redistributed friction

FRICTION MAY SHIFT TO OTHER PEOPLE, PLACES, AND ENVIRONMENTS.

Emotional tension

TENSION MAY EMERGE WHEN HIDDEN CONDITIONS BECOME VISIBLE.

MY ASSUMPTION & LIMITATIONS

I assumed that REVEALING HIDDEN LABOR AND PROCESSES would create EMOTIONAL FRICTION. However, I have not yet determined what information produces which emotions or how long those emotions last.

WHAT MAY STILL BE MISSING

Scope

THE FOCUS OF HIDDEN LABOR REMAINS UNDEFINED.

Evidence

EMOTIONAL FRICTION REMAINS UNTESTED WITH OTHERS.

Responsibility

USER RESPONSIBILITY FOR AI USE REMAINS UNCLEAR.

Visibility

DISCLOSURE MAY CREATE FRICTION OR BE IGNORED.

Research

STUDY RELATED PROJECTS AND PRECEDENTS.

Map

LOCATE FRICTION WITHIN THE AI USER JOURNEY.

Test

OBSERVE EMOTIONAL RESPONSES WITH OTHER USERS.

Refine

NARROW THE SCOPE AND WORKING RESEARCH QUESTION.

Q.

HOW DOES THE EXPERIENCE OF SMOOTHNESS CHANGE WHEN THE HIDDEN LABOR AND MATERIAL PROCESSES BEHIND AI BECOME VISIBLE?