

Reading Response

Situated Knowledge and Designerly Ways of Knowing

From Donna Haraway's "Situated Knowledges," I took the idea that all knowledge is produced from a particular social and cultural position and perspective. No perspective is completely neutral or universal. Researchers should recognize the limits of their own viewpoints and ask whose experiences are included or excluded when a particular standard is presented as universal.

Applied to my topic, the belief that smoothness represents good design may also come from a particular perspective. Users, designers, and technology companies experience the same interface from different positions. Therefore, I can examine who defines smoothness, which users are treated as the standard, and whose experiences are excluded from that definition.

From Nigel Cross's "Designerly Ways of Knowing," I took the idea that designers work with ill-defined problems and develop knowledge through making. Sketches, models, and prototypes are not only ways of presenting finished ideas. They can also function as tools for thinking and discovering new questions and possibilities.

From this perspective, I do not need to define Design Friction completely before beginning to make. By creating and comparing different forms of friction, I can discover when friction encourages reflection and when it becomes a simple inconvenience or barrier. Haraway provides a critical lens for questioning the perspectives, power relations, and exclusions surrounding smoothness, while Cross provides a method for investigating these questions through making and experimentation.

01

Identifying Current Beliefs and Their Sources

Belief 1: Smoothness Is Commonly Considered a Standard of Good Digital Experience

I believe that fast, intuitive, and seamless experiences are commonly treated as standards of good digital design. Features such as infinite scrolling, autoplay, and personalized recommendations allow users to continue acting without having to pause or make conscious decisions.

This belief developed through my previous thesis research and my observations of the digital platforms I use in everyday life. It was also influenced by the importance placed on efficiency, convenience, and ease of use within UX/UI design.

Belief 2: Smoothness Can Make Systems Invisible

I believe that smoothness is not simply a form of convenience. It can also make it difficult for users to recognize how digital systems operate and what intentions exist behind them.

This belief was influenced by Shoshana Zuboff's "Big Other: Surveillance Capitalism and the Prospects of an Information Civilization." Zuboff explains that digital platforms collect users'

experiences and behaviors as data and use them to predict and influence behavior, while these processes often remain difficult for users to see.

Beatriz Colomina and Mark Wigley's *Are We Human?* also argues that design does not simply serve people; it shapes human behavior and perception through environments that appear natural. By connecting these perspectives to infinite scrolling, autoplay, notifications, and personalized recommendations, I began to understand smoothness as something that can make the structures of data collection and behavioral influence feel natural and difficult to notice.

Belief 3: Design Friction Can Encourage Users to Pause and Reflect

I believe that friction does not necessarily mean an error or inconvenience. When it is carefully designed, friction can interrupt automatic behavior and create an opportunity for users to reconsider systems and actions that normally remain unnoticed.

This belief was influenced by “Design Frictions: Stimulating Critical Reflection and Participation” and Lars Hallnäs and Johan Redström’s “Slow Technology: Designing for Reflection.” These readings suggest that delay, time, and inconvenience can function as design elements that encourage reflection rather than only as problems that need to be removed.

Belief 4: Not All Friction Is Positive

Although friction can change a user’s awareness, I do not believe that every form of friction is meaningful or beneficial. Poorly designed friction may create unnecessary inconvenience. It can also become a barrier for disabled users or people who are less familiar with digital environments.

This belief developed through my research on Design Friction and Slow Technology, and it also connects to Donna Haraway’s “Situated Knowledges.” Haraway emphasizes that knowledge and perspectives are always shaped by particular positions and experiences. This made me consider that friction I find interesting or productive may not be experienced in the same way by every user.

Sources

- [Shoshana Zuboff, “Big Other: Surveillance Capitalism and the Prospects of an Information Civilization”](#)
- [Beatriz Colomina and Mark Wigley, *Are We Human?*](#)
- Cox et al., “Design Frictions: Stimulating Critical Reflection and Participation” (2016)
- Lars Hallnäs and Johan Redström, “Slow Technology: Designing for Reflection” (2001)
- Donna Haraway, “Situated Knowledges” (1988)

Existing Narratives and Assumptions Surrounding the Topic

The most common narrative surrounding Design Friction and smoothness is that a digital experience becomes better when it operates quickly, conveniently, and without interruption. An interface is often considered successful when users can accomplish their goals without noticing the interface itself. From this perspective, delays, confusion, and additional moments of decision-making are treated as problems that should be removed.

This narrative assumes that users always want faster and more convenient experiences and that convenience benefits both users and platforms. It also assumes that personalization and automation support user choice and that greater engagement indicates a better experience.

However, smoothness may not be a neutral design quality. As users move continuously through a platform, their data can be collected, while paths designed by the platform may appear natural or freely chosen. Therefore, the existing narrative that “smoothness is always designed for the user” does not fully explain who defines convenience, who benefits from it, or what becomes invisible in the process.

03

Investigating Who Creates and Repeats the Narrative

The narrative that fast, convenient, and seamless experiences represent good design has largely been created and repeated by technology companies, digital platforms, and the UX/UI industry. Speed, personalization, automation, and ease of use are commonly presented as signs of technological progress.

However, the groups participating in this narrative do not necessarily share the same goals. Users may genuinely want convenient and efficient experiences, while platforms can use smoothness to encourage them to stay longer and participate continuously. This activity produces more behavioral data, which can then be used to predict user behavior and encourage further engagement.

The narrative of smoothness is therefore shaped by more than user needs. It is also influenced by corporate efforts to transform attention and data into economic value, the technology industry’s emphasis on efficiency and growth, and design conventions that treat friction as a problem to be removed. Although users and platforms may both pursue smoothness, users receive convenience while platforms can gain engagement, data, and profit.

04

Investigating Who Benefits

Both users and digital platforms can benefit from smoothness, but the type and scale of their benefits are different. Users gain convenience through faster navigation, simplified payments, automated recommendations, and services that require less effort. A seamless interface with well-designed accessibility can also make complex technology easier to use.

Platforms, however, receive more direct economic benefits from continuous user engagement. The longer users remain on a platform through infinite scrolling, autoplay, and personalized recommendations, the more advertisements the platform can display and the more behavioral data it can collect, including clicks, searches, viewing time, and purchases. This data can be used to predict users’ interests and future behavior and to further personalize their experiences.

Advertisers and data-analysis companies also benefit because behavioral data allows them to target specific groups more precisely. Designers and developers participate in this system by helping companies achieve goals related to engagement, conversion, and growth. Smoothness therefore primarily provides users with convenience, while companies can accumulate data, influence, and profit.

05

Investigating Who Is Excluded or Harmed

Digital environments centered on smoothness can exclude users whose needs, abilities, and behaviors differ from those anticipated by the platform. Interfaces built around quick responses and continuous engagement may not adequately consider people who need more time to process information, those who are less familiar with digital environments, or users with neurodivergent, cognitive, visual, or motor needs.

While users gain convenience, they may also find it difficult to recognize how their attention, time, and behavior are being used. Infinite scrolling, autoplay, notifications, and personalized recommendations can direct the next action before a conscious decision is made and may reinforce repetitive or compulsive habits. Users who do not want to share their data or follow the path provided by the platform may also have limited practical choices.

Groups that are underrepresented in datasets may be excluded or incorrectly classified by personalization and automated systems. The labor of people who moderate content and classify data can also remain hidden behind apparently seamless services. Smoothness therefore does not provide equal convenience to everyone; the seamless experience of some users may be sustained through other people's time, data, and invisible labor.

06

Counterarguments and Contradictions

One counterargument to Design Friction is that smoothness does not necessarily manipulate or exploit users. Seamless interfaces can reduce the time and effort required to complete a task and make complex technologies and information easier to access. For disabled users or people who are less familiar with digital environments, unnecessary friction may become an accessibility barrier rather than an opportunity for reflection.

A preference for convenience also does not necessarily mean that users are passively controlled by platforms. People may intentionally use autoplay or recommendation systems and may choose a service while understanding the trade-off between convenience and privacy. Data collection can also support useful functions such as improved search results, accessibility, content recommendations, and security.

This creates a contradiction within Design Friction. Friction may help users recognize a system, but frequent or compulsory interruptions can become another form of control. A company may also introduce friction under the language of “digital well-being” or “ethical design” while leaving its underlying data collection and profit model unchanged. In that case, friction may improve the platform’s responsible image without creating meaningful structural change.

The central question is therefore not whether smoothness or friction is inherently good. It is necessary to ask who designed the friction, who it serves, whether users can control or reject it, and whether it genuinely makes the system more visible.

07

Expanding the Inquiry into Three Directions

Direction 1: For Whom Is Friction Reflective, and For Whom Is It a Barrier?

Central question: Can the same friction create an opportunity for reflection for one user while becoming an accessibility barrier for another?

New perspective: Design Friction does not affect every user in the same way. Its meaning and impact may change depending on a user’s physical condition, cognitive processes, digital experience, and context of use.

Related case or source: Donna Haraway’s “Situated Knowledges” and examples of accessible and inclusive design

How my thinking changed: I initially understood friction as a positive intervention that could interrupt automatic behavior and encourage reflection. I now recognize that the same friction can create an additional burden or exclusion for some users.

New question: If users could choose or adjust the type and intensity of friction, could reflection and accessibility be considered together?

Direction 2: Can Friction Also Become a Tool of Control?

Central question: Can friction introduced to protect users or encourage reflection become another method of directing and controlling their behavior?

New perspective: Friction does not always resist platform power. Confirmation windows, time limits, warnings, and digital well-being features can also direct users toward behaviors selected by the platform.

Related case or source: Screen-time notifications, “Are you still watching?” messages, privacy consent interfaces, and digital well-being tools

How my thinking changed: I previously considered friction an alternative to smoothness. However, I discovered a contradiction: depending on who designs it and for what purpose, friction can also reinforce existing structures of power.

New question: How can we distinguish friction that gives users greater agency from friction that controls their behavior?

Direction 3: Does Smoothness Remove Friction, or Does It Relocate It Elsewhere?

Central question: Does a seamless user experience actually eliminate friction, or does it relocate friction to people and places the user cannot see?

New perspective: Smoothness and friction may not be opposites. One person's seamless experience can be produced through another person's labor, time, risk, or inconvenience.

Related case or source: Content moderation, delivery and logistics labor, data labeling, data centers, and the environmental costs of digital services

How my thinking changed: I previously thought that friction either existed or was removed within the interface. I now recognize that friction may not disappear at all. Instead, it may be transferred to other workers, spaces, or environments within the larger system.

New question: Who experiences greater friction to make user convenience possible, and how might design reveal this relocated friction?

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Connecting Cases and Sources to Each Direction

Direction 1: For Whom Is Friction Reflective, and For Whom Is It a Barrier?

Case 1: Website time limits

Payment and application websites often log users out after a certain period for security and efficiency. This may not affect some users, but people who need more time to read, understand, or enter information may lose their work and have to restart the entire process.

In this case, the burden created by the system's security and efficiency is transferred to users who require more time. The same friction may be a minor notification for one person but a barrier that prevents another from accessing the service.

Case 2: Notifications and pop-ups

Notifications and pop-ups can interrupt automatic behavior and help users notice important information. However, users with cognitive or learning disabilities may find it difficult to remember their previous task or regain focus after closing a pop-up.

The important question is therefore whether users can dismiss, delay, or control the interruption. An interruption that cannot be controlled may become a cognitive burden rather than an opportunity for reflection.

Related sources

- [W3C, Web Content Accessibility Guidelines 2.2](#)
- [W3C, Cognitive Accessibility: Help Users Focus](#)
- Donna Haraway, "Situated Knowledges" (1988)

Direction 2: Can Friction Also Become a Tool of Control?

Case 1: Apple Screen Time

Apple Screen Time measures usage and sends an interruption when a user reaches a set limit. When users review their own habits and establish their own limits, this friction can create an opportunity to reconsider their behavior.

However, when the limit is established by a parent or system, users must stop according to a standard determined by someone else. In this case, friction does not increase user choice. It allows the system to define appropriate use and control behavior. The meaning of the same feature therefore changes depending on who has control over it.

Case 2: Limiting social media scrolling

“Design Frictions on Social Media” examines an interface that asks users whether they want to continue after viewing a certain number of posts. This question can make users aware of repetitive scrolling and give them time to decide whether to continue.

However, the designer still determines when the interruption appears, what question is presented, and which response appears desirable. Users seem to make their own choices, but the system continues to design the conditions under which those choices are made. Friction therefore contains a contradiction: it can support autonomy while also directing behavior in a new way.

Related sources

- [Apple, Screen Time](#)
- [“Design Frictions on Social Media”](#)
- “Design Frictions: Stimulating Critical Reflection and Participation” (2016)

Direction 3: Does Smoothness Remove Friction, or Does It Relocate It Elsewhere?

Case 1: Amazon Echo, resources, and labor

A user can turn on a light simply by saying, “Alexa, turn on the light.” The need to find a switch or move across the room disappears, creating a fast and convenient experience.

However, this convenience depends on extracting minerals, manufacturing components, transporting the device, processing voice data, and operating data centers. The time, repetitive work, physical risks, and environmental costs that users do not experience are instead carried by miners, factory and logistics workers, data workers, and communities near extraction and computing infrastructure. The user’s friction has not disappeared; it has been relocated through the supply chain.

Case 2: Social media content moderation

Social media users can move through feeds from which some violent and harmful material has already been removed. The friction of repeatedly encountering and evaluating unwanted content remains invisible within the interface.

However, this content does not disappear automatically. Content moderators review large quantities of images and videos and decide whether they should be removed. They absorb the time, discomfort, and psychological burden that users avoid. In this case, a safer and smoother user experience is

produced by relocating emotional and psychological friction to other people.

Case 3: Ghost work behind automation

When AI recognizes an image or sentence immediately, users may assume the system makes every decision automatically. Before AI can recognize a car, however, workers may need to mark and classify cars in thousands of images. People also review and correct the system's inaccurate results.

The speed of automation therefore does not mean that difficult and repetitive work has been eliminated. That work has been transferred to data-labeling workers, while users see only the finished result. The smoothness of automation is created by moving human labor outside the visible interface.

Related sources

- [Kate Crawford and Vladan Joler, "Anatomy of an AI System"](#)
 - [Sarah T. Roberts, *Behind the Screen*](#)
 - [Mary L. Gray and Siddharth Suri, *Ghost Work*](#)
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09

Summarizing Findings and Reflection

Through this research, I discovered that smoothness and friction are not opposing or separate concepts. Instead, they exist in an interconnected relationship and continuously produce one another within the same system. The smoothness provided to users may not eliminate friction but relocate it to other workers, places, or environments. Seamless AI services depend on data-labeling labor, while curated social media feeds rely on workers who directly review harmful content.

Conversely, intentionally visible friction can help users recognize the data collection, human labor, and power relations hidden by seamless experiences. However, friction does not always increase reflection or autonomy. The same interruption may give one user time to think while creating a cognitive burden or accessibility barrier for another. Depending on who controls it, friction may function as either a tool for self-reflection or a method of behavioral control.

The goal is therefore not to define either smoothness or friction as inherently positive or negative. The more important questions are whether friction has actually been eliminated, where it has been relocated, how it is distributed, and what it makes visible or invisible.