

# Computed Discourses

Essays on the intertwinings of computation, language and expression.

# Foreword

The *Computed Discourses* seminar connected two considerations: language enables discourses, and computers manipulate language.

Starting from discourses as a frame for knowledge and media as a frame for expression, we discussed the specificities (or lack thereof) of computation as automated, dynamic calculation on real-world entities. Particularly, we paid attention to how computation *affects* discourses, by delimiting how we say things, and how computation *embodies* a discourse, enmeshed in high-modernist and rationalist logics.

This booklet collects the final essays of the participants in the seminar.

You can find all of the course materials at: [gitlab.com/periode/computed-discourses](https://gitlab.com/periode/computed-discourses)

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# Apple's promise of 'creativity'

Eunseong Park

This article begins with the question of whether Apple's brand philosophy of creativity is actually limiting the creativity of its users through its hardware and software. Through a few examples of how Apple devices have enabled and constrained users' creative activities, this article aims to expose the friction between Apple's claimed creativity and the actual creativity of its users. What is creativity in today's capitalism, with its emphasis on aesthetics and personalized value consumption? According to sociologist Andreas Reckwitz, creativity is the activity of discovering dramatic newness and the capacity to receive sensory and emotional stimulation from new human-made objects. Apple claims to provide the tools and environment for creativity through its marketing and its ecosystem, but at the same time, it operates in a closed loop to ensure the consistency of its system and has a monopoly on the market.

On the other hand, it can also be argued that creativity requires limitation, as without a framework of conceptual and conventional restrictions, the creative act itself would not be possible. For example, in painting, the constraints of flatness and size of the canvas were both a limitation and a creative field for the artist. So, just as artists have traditionally assumed certain costs to create - tools, space, materials - Apple's devices, software, and terms of use can be understood as necessary costs of creativity. Instead of seeing the constraints of a particular platform as an oppressive framework, can we embrace them as another condition of creation? What is the difference between buying a paintbrush and buying an Apple Pencil?

## Working and creating within Apple - what does Apple mean by "creativity"?

First, we need to define what creativity is and how it affects us. In the act we call creativity, we envision an innovative shift beyond the status quo. In *The invention of creativity*, Andreas Reckwitz explains that creativity historically emerged from countercultural movements in the Western art movement. From modern to contemporary times, creativity has moved from artistic practice to become a core principle that increasingly influences labor and economic systems. In the modern era of the 1980s, creativity is firstly the act of making something new, and secondly, it is linked to the image and aesthetic sensibility of the modern artist. The creative output

is perceived as aesthetically beautiful, a source of renewed vitality and pleasurable stimulation. Accordingly, the artist who produces the creative product is symbolized as the creative identity. This trend toward individualized creative selfhood has led to changes in the forms of labor and organization. Repetitive physical labor and desk-based activities have gradually been replaced by new forms of producing signs and symbols, such as texts, images, communications, procedures, aesthetic objects, and body modifications.<sup>1</sup> Reckwitz points out that creativity has become a societal obsession, and both individuals and societies are constantly striving collectively to become more creative. He explains that *The creativity ideal of the once marginal, utopian, aesthetic-artistic opposition has percolated up into the dominant segments of contemporary culture to condition the way we work, consume and engage in relationships, and it has undergone a sea change in the process.*<sup>2</sup>, emphasizing that creativity in contemporary society now operates systemically across all areas of life. The following two cases illustrate the conflicts faced by users who want to experience Apple's creativity in practice or enter the Apple platform. They show the tensions of creativity in the Apple ecosystem. By comparing Apple's idea of creativity with the creativity of its users, and how these two concepts differ in practice, the meaning of creativity can be explored.

## Creative software

Since Apple promotes creativity as a central part of its marketing, it also provides a range of creative software tools recognized by professionals. Final Cut Pro and Logic Pro are professional-grade, paid programs used for video editing and music production, while iMovie and Garageband are free alternatives. In addition, iWork's pages, keynotes, and numbers are free built-in programs that let you create documents, tables, and presentations, just like Microsoft's word processors. All of these are either made by Apple or acquired by Apple, and together with Apple devices and software, they make for a professional-level creative environment. It's interesting to note that both Garageband/Logic Pro and iMovie/Final Cut Pro are video and sound creation programs, while image software like drawing, 3D, and animation rely on external apps (Adobe, Blender, Procreate, etc.). So why does Apple develop music and video production programs in-house, but rely on external software for image creation? This is still hypothetical, but I think it has to do with Apple's content distribution platforms, Apple Music and AppleTV. In music and video, Apple controls key parts of the ecosystem, while other areas, such as image creation, rely on third-party software. In fact, the introduction of the iPod changed both the supply and demand side of the music industry. Previously, music was shared unauthorized through the peer-to-peer file-sharing application Napster, which was eventually shut down due to copyright violations. The iPod bridged the gap between the convenience of listening to music when and where one wants it and legal distribution, and iTunes was indispensable for listening to music on the iPod. Music could only be transferred

to iTunes, and within it, digital rights management (DRM) enforced legal music purchases and drove them into the Apple ecosystem. *Until now, Apple has facilitated its market dominance by deliberately limiting interoperability with non-Apple devices and non-Apple online music stores for iPod and iTunes Music Store ("iTMS") users.*<sup>3</sup> Shoshana Zuboff summarizes it this way. *Napster hacked the music industry, but Apple appeared to have hacked capitalism.*<sup>4</sup> Apple TV has also created a revenue structure that combines hardware, appleTV, and software through subscriptions. By providing creative tools directly to its platforms, Apple is re-emphasizing its core identity of "creativity" and integrating it as part of its ongoing revenue structure.

## Human Design Guidelines: Designers and Developers Entering the Apple Platform

Apple's interface is a WIMP (window, icons, menus, pointer) model, which is one of the most popular graphical user interface (GUI) formats, modeled after the paper-based office. The introduction of the Macintosh computer in 1984 marked a turning point in user interface (UI) that made it easier for non-computers to use. With it, various functions were integrated, GUIs became the default for systems, and consistent UI design standards were established.<sup>5</sup> Kaspar Visnapuu compares Apple's Human Interface Guidelines, Google's Material Design, and IBM's Design System, focusing on three keywords: Consistency, Efficiency, and Scalability, and analyzes how each company's design experience was built in different directions.<sup>6</sup> All three companies adopt these three elements as the core principles of their interface GUI design. Apple in particular values consistency and maintains its brand identity by controlling various elements such as the San Francisco typography, color scheme, icons, and layout. This coherent design ensures that users continue to experience the immersive feeling of the Apple ecosystem even when using different apps. On the other hand, while this aesthetic and functional consistency creates a sense of security for existing users, it can also be criticized as a barrier to entry and confusing for those unfamiliar with the Apple experience. Visnapuu suggests that Apple's design guidelines can have ethical implications beyond aesthetics. This impact is not limited to the Apple ecosystem, but extends to the outside world as well. One Reddit user recounts a conflict with a boss who insisted on using Apple's design guidelines. The perception that Apple's design is "better" has led to a tendency among many tech companies to blindly follow it. As a result, Apple's UX reputation is seen as an *absolute standard*, and the culture of uncritical conformity has spread to many companies.<sup>7</sup> In another example, Hey, a subscription email app developed by Basecamp, was rejected from the appstore. The reason given was that Hey didn't follow section 3.11 of apple's guidelines. The problem was that Hey didn't offer in-app purchases and only offered subscription payments through its website. This was because Hey didn't offer in-app purchases and only drove subscription payments

through its website.<sup>8</sup> This escalated into a public debate when Basecamp's CEO took to Twitter to criticize Apple's guidelines and review policy. The design guidelines for entering the Apple ecosystem limit creative flexibility and create a structural disadvantage that requires a large amount of intermediary costs compared to other markets to gain a presence in the App Store. These costs are often passed on to the end user rather than being borne by the developer or designer, leading to consumers paying relatively more to use apps on Apple devices. Visnapuu emphasizes the role of the community as a possibility to address this imbalance. Software developers, designers, stakeholders, and end users are key components of the community, he suggests, and can influence design systems and trends. Based on this, it can be speculated that creativity at Apple is tied to profitability. As Reckwitz describes creative activity as a constant striving for novelty by individualized groups, based on a model of the creative self, Apple's creativity, in this sense, anticipates and promises the freedom of self-actualization to create novelty, but it is organized around a profit-oriented system to deliver on that promise. And individual users have a metaphor of creativity within that system by purchasing a device. The core services of music and video are again used as a promotion of creativity and as a means of communicating the value that individual users can create their own content. Apple's guidelines imply a framework of *allowed creativity* in that users are encouraged to focus on programmatic creation within the bounds of the Apple platform, without compromising the aesthetic prescribed by the Human Interface Guidelines. This is problematic in that it stifles the flexibility of activity and design for third-party brands, including communities within Apple's platforms.

## What it means to have an Apple-exclusive experience: Apple's magic and dark hardware

Apple is one of the most influential tech companies, developing and producing modern computers and other devices. In 1977, Apple entered the personal computer market with the Apple II. It was a low-barrier personal computer for first-time computer users and hobbyists. Apple has since expanded its product line with the introduction of the iMac in 1998, the iPhone in 2007, and the iPad in 2010. Since then, the hardware has been upgraded almost annually, with better display quality and more advanced, safer materials. Along with high-end, stylish hardware, Apple has built operating systems like MacOs, iOS, and iPados, as well as its own UX/UI, to ensure both technical reliability and an aesthetic user experience. Furthermore, Apple has expanded into a software-based cultural content curation company. By integrating hardware, software, apps in the app store, and a variety of content such as Apple Music, Apple TV, and Books, Apple has made a huge impact on users' work and leisure.

The emotional satisfaction that comes from the experience of using Apple products can be described as the technology of Enchantment in Alfred Gell's *Technology and Magic*. From an anthropological perspective, Alfred Gell does not view technology as merely the invention of tools. He understands technology as a network of social relations that shape the processes by which goods are produced, distributed, and consumed. In these technological acts, technical means are used in creative and circuitous ways to reach desired ends. Gell categorizes technology into three domains. First, Technology of Production is the universal system of producing materials; second, Technology of Reproduction is the technology based on kinship, which serves to maintain social systems through the reproduction and domestication of human beings. And third, the Technology of Enchantment is a technology that works on the inner minds of others to realize its own social benefits. These technologies appear magical because the structure of the technical act is symbolized and codified. Like the imaginative play of a child moving a model airplane and saying, "It flies," performance and commentary work together to construct reality in a symbolic and idealized way. By concealing the laborious process of reality and framing it as a symbolic and idealized technology, the effect is more dramatic. Gell expands on this structure of imaginative play to explain how technology can be made to appear magical, using product advertisements as a prime example. The ads present the product in flattering images and motivate potential customers through a mystified narrative.<sup>9</sup> I found this technique to be deeply connected to the way Apple presents its products.

Apple utilizes the 4Ps marketing strategy (Price, Product, Place, Promotion).<sup>10</sup> The first is Price, where Apple sells devices with its latest technology at a premium price to justify the high specs and services that go along with it. It builds a brand image of providing value for the high price and continues to attract a loyal customer base. The company also launches low-end models for beginners and consumers with limited budgets, providing price points to suit a wide range of consumer preferences. Product is about bringing products to market that meet consumer demand, including striving to exceed expectations with sleek design, integration into the Apple ecosystem via iCloud, and superior performance. Place refers to the overall distribution strategy, including the online and offline distribution channels and global store network utilized to reach target markets. Promotion focuses on building and maintaining Apple's strong brand image. Promotion emphasizes Apple devices' stylish imagery, cutting-edge technology, intuitive interfaces, and seamless integration of hardware and software, with minimalist but powerful copy that appeals to consumers. Apple's slogans, such as "think different" and "If you can dream it, Mac can do it," create an expectation that users will experience Apple devices like never before, and ultimately inspire them to imagine that their creativity can be realized. Apple's ability to build brand loyalty with users is a combination of high quality products, reliable distribution and after-sales support, strong connectivity in the Apple ecosystem, and effective promotions.

Apple has always fostered continuity and connectivity between devices through a tight combination of hardware and software and its own ecosystem (Universal Control, AirDrop, Handoff, screen mirroring, etc.). By establishing the reliable connectivity of Apple computers as a work environment, the concept of the Apple ecosystem emerged. The system has expanded with each new device release, and features such as AirDrop and Universal Clipboard, among others, utilize Bluetooth and wifi-based technologies to seamlessly transfer documents and data between devices. With iCloud, the data on each device is synchronized in real time, and a single task can be continued on multiple devices. In the end, the Apple ecosystem is a network of Apple devices that *work together* and *feel like one*, seamlessly connecting Apple devices to each other without distinction and without interruption.

The tighter Apple products are connected, the more closed they are, making cross-use between Apple and non-Apple products more difficult. For example, transferring data between an Android smartphone and a MacBook requires a separate app and a wired connection, whereas iPhones and MacBooks can transfer files wirelessly with AirDrop. The difference between the ease of connectivity between Apple devices and the inconvenience of connecting with non-Apple products is what drives "biased consumption," which is the tendency to buy more Apple products. According to data journalist Felix Richter, iPhone users are more likely to buy accessories and peripherals from Apple, such as the Apple Watch and AirPods. 79% of iPhone users use an Apple Watch, compared to only 22% of Android phone users. In other words, once users start using Apple's products, they are easily drawn into the Apple ecosystem<sup>11</sup>.

I like to use the term "dark hardware" to describe their exclusivity, in reference to the concept of "dark patterns." Whereas "dark patterns" are designs in the UI that force users to take certain actions (like uninstalling an app on a Mac requires you to manually go into a folder and delete the files), "dark hardware" are lock-ins and exclusivity at the hardware level that limit your choices and force you to make additional purchases. For example, Samsung's S Pen is compatible with Galaxy devices and Third parties while Apple Pencil only works with the iPad. This raises the question of why the Apple Pencil can't be used on an iPhone, or even more so, why it can't be used on a MacBook?

This strategy is also evident in the way Apple launches products and expands its ecosystem. They assign clear roles to different sized devices and then expand the ecosystem by emphasizing the connections between them. One of the strangest examples of this is the MacBook-ization of the iPad, where Apple introduced the Magic Keyboard, a detachable keyboard that magnetically attaches to the iPad. Combine the iPad Pro with the Magic Keyboard for iPad Pro, and it's actually a MacBook-like form factor. While this shows a commitment to maintaining the character and role of each device, it also reveals a waste of resources and money. This is the opposite direction Apple has taken with the Lisa project. Whereas in the

past they tried to make things simpler and more user-friendly by integrating features, now they've shifted to a strategy of separating devices and leveraging hardware dependencies.

So how does the seamless connectivity of Apple's ecosystem impact creativity? The benefits of Seamless include the ability to seamlessly switch between devices, allowing for scalability that removes physical and systemic limitations from the creative space. The freedom to work on creative programs when and where they want, on any device, is maximized. It's a scalable environment for creative work. Mirroring and screen scaling between Macs, iPads, and iPhones, as well as Universal Control, which allows a single cursor to move across devices, make the creative experience more organic. But the premise is *owning multiple Apple devices*. In the first place, all that connectivity and continuity is only available to those who can use multiple devices simultaneously. Compared to the days when we started with a single computer, we've moved into an era where a single creator needs to own, connect, and switch between multiple devices. If you can do everything with one device, you may not need most of the scalability that comes with seamlessly connecting multiple devices. This leads us to ask whether seamless connectivity actually liberates creativity, or whether it limits it by forcing us to operate within a set framework. In the end, the question of *what's the difference between buying an Apple pencil and buying a brush?* shouldn't be about the cost to a single creator, but about the conditions of creativity that a platform creates. Ecosystems may not really be the tools of our choice, but rather the result of the structural mechanisms that drive justified consumption.

## Conclusion: What terrain are we creating/working in?

In *The Future of the Internet*, Jonsthan Zittrain compares the iPhone to the Apple II. He describes the Apple II as a generative technology, functioning as a platform that *invites* users to experiment, while the iPhone is a pre-programmed, unproductive and "sterile" technology. Since Apple had the power to modify the iPhone system. *The machine was not to be generative beyond the innovations that Apple (and its exclusive carrier, AT&T) wanted. Whereas the world would innovate for the Apple II, only Apple would innovate for the iPhone.*<sup>12</sup> Zittrain analyzes this change as a result of Apple choosing stability and control over freedom because of the problems that came with the openness of the Apple II - viruses, spam, identity theft, and system failures. Constraints and controls were necessary in order for the system to be predictable and stable. And as technology evolves, such defensive and controlling systems are likely to become more and more prevalent in the future.

In the midst of these systemic changes, we, as users and producers, need to ask the question of what kind of terrain are we creating in? Creativity is not only about the ability to create something new, but also about the system within which that creativity

is enabled and *under whose control*. Technology and design are increasingly driven by consumer demand and corporate profits. Big tech-centered design has become a trend, and users and third parties follow along. Apple users' creating infrastructure is deeply embedded in the social and economic structure of creativity, and is subject to the logic of corporate profit. But even within this limited technological structure, new expressions of creativity continue to emerge.

Creativity, to me, is an event where novelty and admiration meet. It has to be something that is both new and meaningful in a communal context. Creativity requires spatial and temporal conditions, a historical context, and an audience. Creative objects often emerge more strongly when an opposing order or convention first exists. The subject practicing creativity must be able to look at an existing issue in a different way, to recognize a problem in it. When the result is perceived by others as something new and meaningful, we call it creative. What I believe is that we can frame new conditions for creativity, set up new audiences, and create events that cause a shift in our senses. We may not be able to flip the whole structure on its head, but like the caterpillar in the apple, we can be the ones to climb the cracks between the subscription model and open source, to gnaw, climb, and shake the system. Developers, designers, creatives, casual users, and legislators are forming small communities to break free from the gravitational pull of big tech. Could there be a time when it's okay to not choose to be creative? A world where we don't have to feel frustrated or defeated for not being creative.

## Notes

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2. Reckwitz, *The Invention of Creativity*, 4.↵
3. Nicola F. Sharpe and Olufunmilayo B. Arewa, "Is Apple Playing Fair? Navigating the iPod FairPlay DRM Controversy," *Northwestern Journal of Technology and Intellectual Property* 5, no. 3 (2007): 333, [<https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1144&context=njtip>]↵
4. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (New York: PublicAffairs, 2019), 28.↵
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7. See the discussion on the following pages: [[https://www.reddit.com/r/androiddev/comments/hziqnm/blindly\\_following\\_apples\\_design\\_guidelines/](https://www.reddit.com/r/androiddev/comments/hziqnm/blindly_following_apples_design_guidelines/)]↵
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11. Felix Richter, "Apple's Tightly Knit iPhone Ecosystem", *Statista*, March 25, 2024,  
[<https://www.statista.com/chart/31973/likelihood-of-iphone-users-using-other-apple-devices/>]↵
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# Talking in the Internet

Soo Youn Bae

I was born in South Korea in 1997. The year 1997 is often referred to as the worst year in South Korean history. The reason is that shortly after being classified as a developed nation by the IMF, South Korea faced a foreign exchange crisis, leading to a series of bankruptcies among large corporations and a sharp increase in unemployment, marking the country's first major crisis (sentence needs revision). However, at the same time, the financial sector introduced the first internet home trading service, allowing people to check stock prices from home. It was also the end of the era of the N-generation, or network generation, born between 1977 and 1997, a time of coexistence between analog and digital technology.

1997 was a subtle year. It was the year when the internet began to be widely adopted in households, *Sailor Moon* was officially broadcast in Korea<sup>1</sup>, and the movie "Access," about a love story that began through PC communications, was released. In Japan, *Princess Mononoke* and *Evangelion* were released in the same year. In the UK, Radiohead's *OK Computer* and Aqua's *Barbie Girl* were released, and in the US, sci-fi films like *The Fifth Element* and *Men in Black* hit theaters. It was the end of the century, a time when anxiety and curiosity about the future coexisted. Amidst these emotions, new technologies and forms of communication entered our lives.

The internet, which spread during a time of chaos, became a refuge for people who were confused, but it also became a symbol of that chaos. As people who had been living their own lives through digital machines called computers became connected, new relationships that had not existed before were formed, and new ways of communicating emerged due to the characteristics of digital machines. From the beginning of this new way of life to the present, people have faced various changes and difficulties. Going forward, I would like to discuss how we can survive in this era without being swept away by the flood of data.

## Digital Writing

Born and raised in such a chaotic situation, the boundaries between everything are blurred. I am not sure when I first used a digital device, nor when the country began to recover from its decline. All I know is that at some point, computers began to appear in homes, and everyone started indulging in luxury again. Still, I clearly remember the first time I saw and used an emoji. It was through an internet novel I

생각에..-\_-^ 눈까지 감고...뛰어내렸다.

★★★★★쿵!!!!!!!!!!!!!!☆☆☆☆☆☆☆☆ “

○ㅏㅇㅑ악!!!!!!!!!!!”

“ㄱㅓㅇㅏㅇㅑ!!!!!!!!!!!”

쪽.....-\_-^..

꼭.....?????ㅇ.,ㅇ

심시시켜!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!1 눈

을 떼트....나는 지은성의 품에 안겨있었고!

그놈과 나에 입술은...달라있었던 것이었다!

!!!!!!!!!!!!!!!!

주위에 보이는 상고애들 3명...총출역포함..

옆에서..경악하는 ....경원이의 얼굴...

그놈은 나를 광진병 걸린 개때듯이 책 찰가래

쳐냈다.

헉...헉...이게 뭐야...이럴수가.....

지은성은 더 놀란듯했다...ㅇ\_ㅇ ㄹㅇ이런눈으로

나를 바라보았다..

영영영...T.T난 주그마..T.T

그놈 친구들도 놀란듯 쑥대이고..경원이는 날

향해 애저로온 눈빛은 보였다..

“미!미안!!!!!!일부로 그런건 아니여쨌!!!!!!”

“ㅇ\_ㅇ”

“미안해!!!!”

나는 일어나 뛰기로 맘먹었다.

“미안해!”하는 한마디만 던져놓고..그러나,

-\_-^ 그놈은 그새 제정신으로 돌아왔다.

“어디.잘.라.구.?-\_-^” 도망치려는 내 손목을

턱 잡으며 싸늘하게 물었다.-\_-^...

“미안해..T.T...고의가 아니여쨌..T.T”

“책 읽어-\_-ㅏ”

“용.T.T..?”

“내 입술에 입술 비빈논은 니가 침이었어.

-\_-^책.읽.겨.”

>.<ㅋㅋㅋ그말을 믿으라고 하는 소리나..젤젤

젤><

그놈이 키스를 한번도 안했잖다니..

Regardless of when they started using the internet, modern people write a lot online. And unlike writing in a limited space such as a page, writing in the internet space, where scrolling down provides infinite space, is different. Messenger apps are particularly common places for writing. We now live in an era where we need to communicate with people in real time, and in such situations, we don't want our writing to sound robotic. We want our words and nuances to be conveyed together, just like in offline conversations where voice and nonverbal expressions are mixed. Just as works with a style similar to Gwiyeoni's novels have emerged, the internet needed a new form of communication suited to the digital format. Especially in spaces where communication is limited to text. While there has been criticism of this, Gretchen McCulloch describes this change as "fantastic." She notes that the decline of arbitrary and elitist standards has increased connectivity among people.

Nonverbal expressions conveyed through the body are a very important element in communication. However, writing is a technique that erases the human body from language<sup>3</sup>. Although punctuation marks can be used to express the tone of speech, this alone is not enough. Writing in colloquial language on the internet is a completely different experience from writing in formal language. Trying to express colloquial language solely through writing, without nonverbal expressions, was frustrating. Formal language texts had a structure, and within that structure, there were sufficient methods for conveying meaning. However, colloquial language texts, which lack structure, had limitations in conveying emotions and nuances.

In the early days of computers, conversations were mostly serious and technical. Then, in 1982, Professor Scott Fahlman introduced the :-) emoticon, which represented human facial expressions, to the digital world. A combination of the words “emotion” and “icon,” emoticons are a way of expressing facial expressions and gestures using punctuation marks, removing the meaning of the characters and using only the symbols. This provided a way to express human emotions that were previously difficult to convey through text alone. In Korea, emojis began to be widely used starting in 1997, when the internet became widely available.

However, the way emojis are expressed varies depending on the cultural context. While forms like X-D, :^), and :-P were popular in the US, on the other side of the globe in Japan, kaomoji (☺☹) emerged. The biggest difference between :-D and \ (^o^)/ lies in the expression of the eyes. In English-speaking countries, emotional differences are expressed through the shape of the mouth, while in East Asian countries, emotions are expressed through the shape of the eyes (☺ ~ ☹) \ ( ' ~ ' ) / \ ( ^ ~ ^ ) ( \* ~ \* ). In the example of Geuryeon's novel above, we can see that in Korea, emotions are also expressed through the eyes, as in -- ^^ TT. Expressing emotions through the eyes alone is an unfamiliar expression method in Western cultures, unless one is familiar with Japanese manga. Thus, the form of emoticons differs depending on the cultural context in which emotional expressions are perceived.

Then, in the late 1990s, emojis were created in Japan. While emoticons are a form of emotional expression that originated on computers, emojis are a form of emotional expression that originated in text messages on mobile phones. Initially, sending photos via text messages was inefficient, so this technology was developed as a replacement, encoding images like text messages. Although it was a communication method used within Japan, in 2008, Apple began supporting emojis on the iPhone when it launched the iPhone 3G in Japan, and in the same year, Google also made it possible to use emojis in Gmail. The digital method of expressing emotions used on mobile phones expanded beyond text messages (SMS) to include computers and the internet. In 2010, the use of emojis gained popularity overseas beyond Japan and was included in Unicode<sup>4</sup>.

However, emoticons and emojis are products of an era when data file transfers were slow. With the revolutionary increase in file transfer speeds and the reduction in file sizes, it became easier to transfer image data over the Internet. As a result, numerous images began to appear on the Internet, mainly on community websites, and image-based Internet memes were born. Internet memes are a means of communication that combines the advantages of emoticons and emojis. They combine the free transformability of emoticons with the intuitive visual expression of emotions found in emojis. Additionally, they go beyond the rigid expressions of emojis by incorporating a variety of expressions from photos and videos found across the internet. Just as one might borrow characters to draw expressions, one can borrow images to create the expression one desires. Internet memes are essentially disposable avatars. With the advancement of smartphones, they have also gained real-time functionality<sup>5</sup>.

## Communicating with Image

The word "meme" originates from Richard Dawkins' book "The Selfish Gene." In it, he argues that all biology is driven by genes. However, he says that culture is driven by memes. He says that all the objects and styles that surround us exist because humans have replicated them. The things around us are the winners of the evolutionary war. He believed that as internet technology developed, it would become a place for memes to spread. He mentioned that computers manufactured in factories would inevitably become hosts for memes, which are forms of self-replicating information, and that the internet world is the perfect environment for memes to thrive. Over time, the term "meme" has come to refer specifically to internet memes, and even this reflects the nature of internet memes, where copies often overshadow the original.

With the advent of memes, conversations on the internet are no longer limited to text. Communication is now possible through memes created with images alone. The ease of replication and transmission has made it possible for images to be turned into

memes and used as personal avatars. With the advent of the technological reproduction era in 1900, the aura began to disappear. As the conditions for creating aura disappeared, sacredness vanished, and we became able to consume works of art easily and quickly anytime, anywhere. This trend accelerated with the advent of the internet era. Benjamin discusses the desire to discover beauty and reproduce it through the act of manipulating replicated music or paintings. It is a desire to become a creator with one's own interpretation, going beyond mere collection. As works are transformed into files and digitized, ownership has become easier, and the value, authority, and context of the works can be ignored<sup>6</sup>.

The decline of aura and the digitization of images make it impossible to trace the author's traces. The authority and copyright of the original work lose their meaning. The definition of the work changes, and its value as a public good is transformed<sup>7</sup>. And people find this entertaining. The meme-ification of images has become a form of play culture. People dig through various videos and photos from movies, variety shows, YouTube videos, etc., to find new topics of conversation. By assigning new stories and values to images that have lost their context, they create new tools for play. This makes conversation possible without words or sentences. Of course, people who are not part of the community where memes are used as language cannot understand the new meanings and language assigned to these memes. However, because of this function, internet communities use memes to distinguish themselves from people outside the community, and creators produce and distribute them out of a desire to share and spread them for reuse. This act of re-creating the original work is the consumption method of otaku described by Hiroki Azuma in his book *Otaku*. Rather than viewing the content as a completed work, they see the possibility of secondary creation within it and reinterpret it<sup>8</sup>. It is not a language shared by everyone in general. It is a new digital language used by otaku in fragmented internet communities.

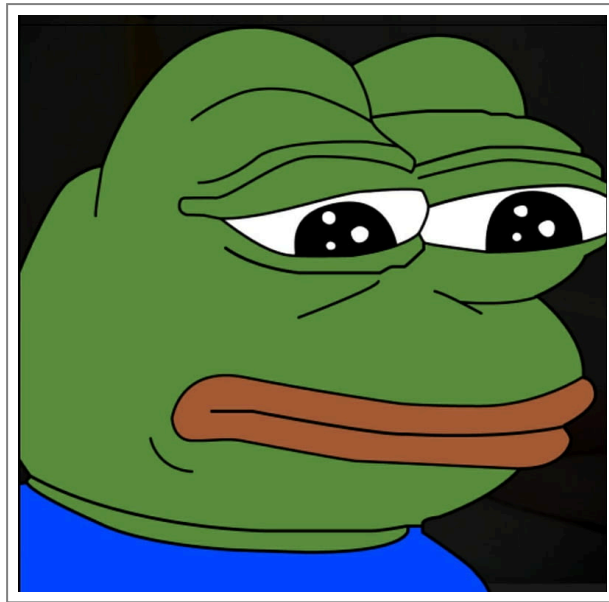
However, if secondary creations were produced and used solely for the amusement of individuals or communities, the internet would be a peaceful place. But reality is never that simple. A prime example is Pepe the Frog. Pepe, the main character of the comic *Boy's Club* by American cartoonist Matt Furie, became a meme with his catchphrase, "Feels Good Man." Originally used to express feelings before and after exercise, it gained popularity as it was combined with photos of celebrities and animals to create various memes. Eventually, it became widely used and reimagined on the American community 4chan, where it began to serve as a primary tool for communication. At some point, it evolved into the iconic meme character representing 4chan.



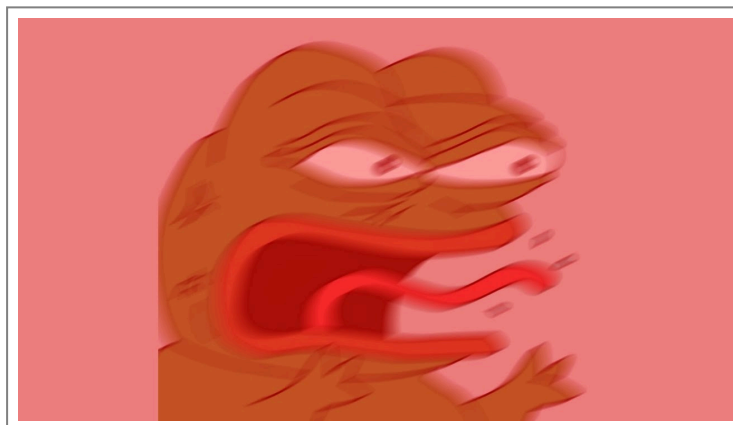
The original Pepe The Frog illustration.

4chan had a system optimized for producing memes. It was a simple system. If a comment received a lot of attention, it moved up the board; if not, it fell down. It was a war for attention. As a result, the main users, teenage boys, became a community that poured out more provocative and offensive posts and images in order to gain attention. As people who couldn't find their place in society and couldn't adapt began to gather, they isolated themselves from the world and projected themselves onto Pepe, strengthening the community's cohesion. At first, they created Sad Pepe memes to reflect their own gloomy reality. However, as these Sad Pepe memes began to gain popularity among "normies" outside the community, they grew angry at the loss of their culture and started creating Angry Pepe memes, shouting "Fuck Normies." From this point on, Pepe began to become more extreme and unpleasant. It evolved into Smug Pepe, enjoying others' suffering and acting as if they were above everyone else outside of 4chan. With the rise of Trump, Smug Pepe was used as a meme supporting him, and alongside 4chan, Pepe became a symbol of the far-right.

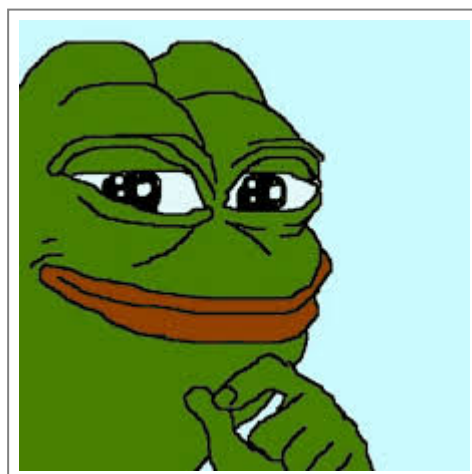




Sad Pepe



Angry Pepe



Smug Pepe

Pepe has undergone gradual changes with the times. Susan Blackmore, author of *The Meme Machine*, commented that Pepe, who has experienced all the pain and processes that can be experienced as a meme, is the perfect example of the ultimate meme.<sup>9</sup> Pepe is very easy to draw. Anyone can easily draw it with just a few lines. Pepe's subtle expression is a face where good and evil coexist. As a result, he could easily be seen as an image of happiness or an image of evil. He had the best conditions to become a meme. In this way, memes play a big role in bringing people together. With just one image, you can show your taste and political orientation at once. Of course, not all memes have political connotations. However, depending on which memes one uses, it is easy to determine which corner of the vast internet world one primarily inhabits. John Michael Greer says that the Pepe meme should be seen as an omen.

*In many traditional societies, it was very common to look for omens. They looked for something completely unexpected, such as revelations or strange portents. This was because it was a warning that society was changing, a sign that something was wrong, or a prelude to something that was about to happen. Pepe is such an omen. We must listen carefully. It will not disappear until we hear what it is trying to tell us.”<sup>10</sup>*

In the digitally connected world of the internet, memes have established themselves as a new form of communication and are now used as a language.

## Living with Internet

As communication methods in the digital world have been established, there have been significant changes in the way modern people communicate. The limitations of expression that arose within the digital format have given rise to a new language and new communication methods. Initially, this language was only used in the digital world, but it is no longer confined to that realm. It is now being used offline as well, and its advantages and disadvantages are becoming apparent outside of the digital world. The criteria for what constitutes a friend or an acquaintance have also changed. A friend is no longer someone you meet in person and share a cup of coffee with. In my youth, the boundaries between online and offline were more blurred. This allowed me to engage in behaviors that disregarded the norms and rules of the offline world, such as dating and even marrying someone I met in MapleStory. I am part of the generation that grew up watching the Digimon series and raising Tamagotchis. I lived with the dream of becoming a chosen child in the Digimon world, fighting and sacrificing myself for that world and my own, even though I didn't fully understand what sacrifice meant at that age. This is a generation that grew up aware of the expanding boundaries between online and offline worlds. And we still maintain

connections with friends met through online games and communities. The boundaries between friends made online and those made offline are also blurred.

Konaka Chiaki, the screenwriter of *Digimon Tamers*, often cited as the saddest series in the Digimon franchise, is also the screenwriter for the anime adaptation of the late-20th-century cyberpunk work *Serial Experiments Lain*. Both works are based on interpretations of digital networks. They construct a worldview where the digital world, accessed through the internet, is not separated from the offline world but is connected to it and can influence it. The digital network is both a utopia and a dystopia. It is a space that can realize things that cannot be done offline and connects people without spatial constraints. *Serial Experiments Lain* expresses this through the words of Lain's father.

*In this world, humans are connected in both the Real World and the Wired, and that's what makes the world go round. Lain will soon make friends. There's no need to be afraid. For some reason, your mother doesn't understand that.*

In this way, the worldview of saving the real world through activities in the digital space, which is both utopian and dystopian, is always sensual. Considering that this concept was born at a time when the decline of hippie culture pushed the space for resistance to the internet, it is understandable why it was imbued with a rebellious image.<sup>11</sup> However, this is nothing more than an end-of-century fantasy. The reality of living a daily life connected to the internet is a little different.

In a life where everything flows away with a scroll, securing time for reflection is extremely difficult, yet it is all the more necessary in this era. In *The Life of the Mind*, Hannah Arendt argues for the necessity of reflection, saying, "A life without thinking is quite possible; it then fails to develop its own essence—it is not merely meaningless; it is not fully alive. Unthinking men are like sleepwalkers."<sup>12</sup> The time spent thinking for oneself, defining oneself, and contemplating who one is is invaluable, even if only to stand as an autonomous individual and take control of one's life. To exist as a solid, distinct being rather than being swept away in the sea of data and living as the 0s and 1s that compose the sea, one needs a mind that prevents the elements that compose oneself from slipping away.

Human beings cannot become angels. At best, we can become fallen angels living in a complex world. Especially the internet is a space that is too well-optimized for us to expel and share the depths of our souls. Like Johan Huizinga's concept of Homo Ludens, humans create culture through play. And with the development of internet communities, the online world has created a magical circle, providing a closed play space. Such play spaces can be defiled by the foul-smelling traces of vomit that reveal and expel the depths of human nature. Yet, whether to use such spaces as a place of purification rather than excretion is a choice left to humanity. I often think of

this meme featuring Will Smith. Let us not regard the internet as our trash can. We must not forget that the words we write there are merely bits and bytes.



Will Smith meme over privacy in the age of social media

## Notes

1. After liberation in 1945, South Korea did not accept the influx of Japanese culture. Due to the strong implementation of cultural destruction policies during the Japanese occupation, there was a strong aversion to Japanese culture, and it was important to revive Korean culture. As a result, until the 1997 policy to lift restrictions on the import of Japanese popular culture, only Japanese popular culture that had been censored and heavily localized could be imported↵
2. Gretchen McCulloch, *Because Internet : understanding the new rules of language* (Riverhead Books, 2019), 7↵
3. Gretchen McCulloch, *Because Internet*, 135-136↵
4. Daniel Hånberg Alonso, *Emoji Timeline*, [https://emojitimeline.com/#google\\_vignette](https://emojitimeline.com/#google_vignette) (02.07.2025)↵
5. 김경수, *한국 인터넷 밈의 계보학* (필로소픽, 2024), 46-49↵
6. 김경수, *한국 인터넷 밈의 계보학*, 55-57↵
7. 김경수, *한국 인터넷 밈의 계보학*, 64↵
8. Hiroki Azuma, *Otaku*, Trans. Jonathan E. Abel and Shion Kono, (University of Minnesota Press, 2009), 29-35↵
9. Arthur Jones (2020), *Feels Good Man* [Video], Ready Fictions↵
10. Arthur Jones (2020), *Feels Good Man* [Video], Ready Fictions↵
11. 김경수, *한국 인터넷 밈의 계보학*, 185↵
12. Hannah Arendt, *The Life of the Mind* (Harcourt, 1978), 191↵

# Personal websites as a tool for creative self-expression on the web

Alicia Luna Ripp

The term *creative self-expression* refers to “an expression of one’s self- whether it be its ideas, feelings, or personality- creatively or through creative art forms” (Jamwal, 2019) and is used to describe different forms of expression, such as “visual art, music, poetry, painting or anything similar” (Jamwal, 2019). With an estimated 45 million people using the internet in 1996<sup>1</sup>, the personal website<sup>2</sup> emerged as a concept that offered the potential to display, discuss, share, and connect through various forms of creative self-expression on the internet.

Customizable websites have been an important tool for self-expression in digital spaces. Companies like GeoCities made the creation of personal webpages accessible to millions of people. One year after their foundation in 1994, GeoCities introduced a hosting plan that allowed users to access a limited amount of web space for free. Within the first weeks after the introduction of the free hosting plan, GeoCities monitored an increase in accesses to their service<sup>3</sup>. By 1999, GeoCities had become the third most accessed website on the internet<sup>4</sup>.

During the 2000s, social-media services like MySpace and Facebook began to emerge, and by 2008 Facebook saw twice as many unique visitors as GeoCities<sup>56</sup>. In 2009 GeoCities was shut down due to a decline in user popularity<sup>6</sup>.

With social-media services like Facebook taking over the spotlight, the question remains: Can fully customizable personal websites still work as a means for creative self-expression in the landscape of modern social media?

This essay will investigate creative self-expression on the internet by taking a closer look at the history of GeoCities as a provider for personal websites, as well as the rise of social media and their modern discovery algorithms.



## Geocities: a place of exploration, self-expression and community

The name GeoCities refers to the *Beverly Hills Internet web hosting company's* initial business concept. An article published by *Business Wire* cites the founder of GeoCities: "GeoCities [...] reflects our vision to build online communities with themes based on real-world landmark locations, where a homesteading program lets netters create their own free Personal Home Pages and their own special-interest content" (Business Wire, 1995).

GeoCities offered a variety of online communities, which were referred to as neighborhoods<sup>8</sup>. To sign up for the service, users only needed to enter their email address. They would then be provided with a small amount of web space, which they could use to create their own website. Upon creating their personal webpage, users had to select a neighborhood that would fit their website's theme and content. Their website would then be linked to the list of websites corresponding to the selected neighborhood, which allowed other users to discover it.

Each neighborhood was named after a location associated with the themes of the connected websites: "In the Athens GeoCity [...] content typically relates to teaching, writing, reading, philosophy, classicism." (Business Wire, 1995). Other GeoCities included names referencing places like *Broadway*, *WallStreet*, *Hollywood* (Business Wire, 1995). To align with the city theme, GeoCities users were referred to as "residents, or 'homesteaders'" (Business Wire, 1995). Furthermore, each user would receive a street number as part of their website's respective URL.

There were no fixed requirements on how closely a neighborhood's theme had to be followed. The *Broadway* neighborhood, for example, would allow both websites centered around acting and theater, as well as websites dedicated to broader cultural themes such as pop/rock musicians. The websites could follow a personal theme, such as the website of a student writing about acting, singing, and dancing in her free time<sup>9</sup>, or they could be dedicated to popular musicians like the *Backstreet Boys*<sup>10</sup> or *Bon Jovi*<sup>11</sup>.

A similar concept to GeoCities' neighborhoods emerged outside the platform in the form of webrings, later defined as "a network of interlinked websites that share a common theme or interest" (Christensson, 2024). Webrings were hosted via *webring.com*, a service that was not linked to GeoCities. Therefore, they could be centered around any theme and include any website, regardless of the respective hosting provider, as long as the website fit the webring's corresponding theme. An example of this is the *Dykenet DykeRing*, a webring that aimed to connect women

who identified as lesbians<sup>12</sup>. Webrings played an important role in the context of creative self-expression, as they allowed users to create and maintain communities of people who share similar interests, themes, or social values.

GeoCities provided an automated website generator that allowed new users “to create their own home pages in minutes, complete with color graphics, links to favorite web sites and any personal information they want to share with the virtual world” (Business Wire, 1995). Users would engage in creative self-expression by generating and customizing their own website to their liking. This could be done through this website generator or through the use of HTML, which allowed users “to use the advanced editor to create a more sophisticated site” (Milligan, 2017). In order to learn about HTML, users of GeoCities could use the community-driven neighborhood system to their advantage. The *Athens* neighborhood linked to a user-generated website that provided instructions on how to use basic HTML<sup>13</sup> for designing and linking to other websites.

An essay about the GeoCities community written by Ian Milligan outlines “the ability to reach a large audience” (Milligan, 2017) as a strength factor of GeoCities. The platform’s neighborhood system was used “to form community through familiar space- and place-based metaphors and rhetoric” (Milligan, 2017). This can be traced back to both the ease of access, as well as both webrings and the neighborhood system. Both of these structures contributed towards maintaining large user-driven communities.

Additionally, in his interview with Business Wire, David Bohnett outlined “quality, diversity and freshness” (Business Wire, 1995) as the key qualities of GeoCities. These points directly link to the previously introduced definition of creative self-expression. GeoCities thus provided a space that allowed its users to engage in creative self-expression on the internet without having to pay monthly fees.

From today’s perspective, the web hosting service GeoCities used its focus on accessibility and community to offer personal websites as a tool for creative self-expression to a large audience. Their free hosting plan and pre-existing structures, such as themed neighborhoods and website generators, lowered the technical entry barrier for inexperienced users. Through dedicated neighborhoods and webrings, users engaged in creative self-expression, not just by designing their own websites, but also by becoming part of interest-based communities that encouraged mutual learning and connection. GeoCities provided everything that was needed to participate in the web landscape of the 1990s.

By December 1998, GeoCities registered 19 million visitors, which made it the third most accessed site on the internet at the time. In the same year, GeoCities purchased *webring.com*. The company hoped that they could use webrings to restructure their service and increase its overall discoverability and traffic. However, these plans never came to fruition as one year later, GeoCities was acquired by Yahoo<sup>415</sup>.



Both of these purchases serve as characteristic examples of the *Dotcom Bubble*. The term refers to investors who would fund internet-based businesses during the 1990s, speculating that they would become profitable in the future. Over the years, share values kept rising, which led to investments “even into debt-ridden companies that had no realistic hope of ever turning a profit” (Duignan, 2025). This led the U.S. federal reserve bank to increase interest rates in order “to reduce investment capital by making borrowing more expensive” (Duignan, 2025). In return, *Dotcom* investors rapidly began to sell their holdings, causing the financial collapse of the *Dotcom Bubble*.

Despite most web-based businesses going bankrupt, *Yahoo* managed to survive the crash, and thus they were able to maintain GeoCities. As a reaction to the collapse of the *Dotcom Bubble*, *Yahoo* shifted its focus away from GeoCities to other products that were able to generate more revenue. As *Yahoo* had stopped integrating new features into GeoCities, the beginning of the *Web 2.0* era saw the rise of new social media platforms. New ideas and concepts that focused on community and connectivity started to emerge. While GeoCities still offered capabilities for creative self-expression, the service had become outdated when compared to the social media services of the late 2000s. Following an official announcement in 2009, *Yahoo* shut down GeoCities<sup>4</sup>.

## The appeal of Social Media

In her article *Fragmented Future*, author Darcy DiNucci defines the term *Web 1.0*, which refers to static web pages with “brochure-like displays of Times or Arial text, eye-grabbing graphics, and highlighted hyperlinks” (DiNucci, 1999). She further characterizes the *Web 1.0* as “essentially a prototype - a proof of concept” (DiNucci, 1999), and expands that the web industry “is set on transforming it, capitalizing on all its powerful possibilities” (DiNucci, 1999). DiNucci then introduces the concept of *Web 2.0*, a dynamic and interactive successor to the *Web 1.0*. As part of this concept, she predicts that “hardware and software [...] will multiply” (DiNucci, 1999). Furthermore, she forecasts that the web would start to be present in a variety of devices other than home computers, such as televisions, cell phones, and video game consoles (DiNucci, 1999).

While Darcy DiNucci coined the term *Web 2.0* and predicted its challenging influence on the web industry in 1999, it took five more years for the term to become popularized. In October 2004, Tim O'Reilly and his company *O'Reilly Media, Inc.* hosted the first *Web 2.0 conference* in San Francisco. Within this conference, leaders of tech-companies discussed the *web as a platform* and laid out a list of principles that would differentiate the *Web 2.0* from its predecessor<sup>17</sup>.

In an article discussing the user perspective on the *Web 2.0*, Grant Blank and Bianca C. Reisdorf point out that “O’Reilly and others are oriented toward businesses and other large organizations that produce content” (Blank & Reisdorf, 2012). The principles that were noted down in the first *Web 2.0 conference* therefore primarily reflected economic interests behind the *Web 2.0* rather than its central themes.

To point out the *Web 2.0*’s central themes, Blank and Reisdorf take on the user perspective. They note “‘network effects’, the idea that some things are more valuable when more people participate” (Blank & Reisdorf, 2012) as the first of two main components. As second component, they name “platforms [that] create simple, reliable environments where users can do what they want” (Blank & Reisdorf, 2012). Examples for these platforms mentioned include “Facebook, Twitter, Google groups, or Meetup” (Blank & Reisdorf, 2012). Based on these two main components, they define the principle of the *Web 2.0* as follows: “Using the Internet to provide platforms through which network effects can emerge” (Blank & Reisdorf, 2012).

When referring back to this definition, it becomes clear that the *Web 2.0* focused on strengthening and utilizing social dynamics on the web. During the *Web 1.0*, services like GeoCities and their associated neighborhoods and webrings had already begun to build up and work with networking effects. These effects were then taken over and transformed by a new generation of platforms that emphasized connectivity and user participation.

The earliest of these platforms was *Friendster*. Launched in March 2002, Friendster aimed to help people connect with old friends, as well as potential new friends via the internet<sup>18</sup>. In order to achieve this, the platform “allowed people to create their own profile, post photos, formulate their social network through connecting with friends and friends-of-friends and browse networks of people” (Case, 2020). Similar to GeoCities, users were able to register for free by entering their email address. *Friendster*’s concept proved to be successful, with the platform registering 3 million new users within its first year<sup>18</sup>.

Inspired by the successful launch of *Friendster*, several other platforms adopted a similar design concept. Two prominent examples are *MySpace* and Facebook. Launched in August of 2003, *MySpace* had 5 million registered users after its first year, and 22 million users after its second year<sup>20</sup>, surpassing *Friendster* in terms of user registrations. In 2004, Facebook was launched, and by 2008, Facebook had registered over 350 million users, surpassing *MySpace* both in terms of user registrations and unique monthly visitors<sup>21</sup>.

To put these numbers into perspective, following the launch of GeoCities’ free hosting plan in June of 1995, it took more than two years until they announced on October 9th 1997 that they had registered their millionth user<sup>22</sup>. Until its closure in 2009,

GeoCities had registered a total of 38 million websites over the course of 14 years.<sup>23</sup> This was already a fraction of what Facebook had reported one year prior, despite their service only having been available for 4 years at that point in time.

After its acquisition by *Yahoo* in 1999, GeoCities had failed to stay up to date with the technical standards of the *Web 2.0* era. According to an article by Rosalie Marshall, GeoCities provided “no way to integrate their sites with third-party applications” (Marshall, 2009). As seen in the examples of *Friendster*, Facebook, and *MySpace*, the integration of different applications was one of the main requirements for a website to successfully meet the standards of *Web 2.0*. The lack of features like user search options made GeoCities appear less appealing for internet users when compared to the emerging social media services.

While technical limitation has likely been a driving factor for GeoCities descent in popularity, the convenience that social media provided over the personal website may not be overlooked. The philosophy behind the *Web 1.0* forced users to leave and browse through numerous different webpages. While this was not necessarily inconvenient, the emerging *Web 2.0* social media platforms provided a new solution where everything was available to be discovered in one place. This new approach made it less complicated for a variety of users to discover, interact, and exchange with others.

Although creative self-expression was not understood to be a central theme of the *Web 2.0*, the focus on user participation still allowed it to be part of the emerging social media culture. Users were able to build communities, share different kinds of resources and media, and various forms of discussion and exchange were possible through the use of posts, comments, and forums. Large user and visitor numbers made it easier for users engaging in creative self-expression to find like-minded peers. Ultimately, the centralization, convenience and interactive features of *Web 2.0* platforms led to a shift away from the personal website as the dominant form of digital presence.

## Social Media has changed

In 2006, Facebook launched its news feed. The purpose behind this feature was of a simple nature - keeping users engaged with the platform by showing them what their friends were doing. Activities such as joining a group, uploading a profile photo, or updating your relationship status would appear in chronological order within the news feed. Three years later, in 2009, Facebook implemented an algorithm that would introduce an interest based ranking to the news feed. Updates were no longer shown in chronological order, instead the algorithm prioritized updates that were considered to spark user interest - for example, a change in relationship status.<sup>24</sup>

After they had introduced the news feed algorithm, Facebook kept improving its accuracy. According to a *Washington Post* article, nowadays the algorithm “can take in more than 10,000 different signals to make its predictions about a user’s likelihood of engaging with a single post” (Oremus, Alcantara, Merrill & Galocha, 2021). In order for any type of data to be considered by the algorithm, it must first be determined as potential source material by Facebook employees. Simultaneously, the desired outcomes of the algorithm’s calculations are also defined by the employees. By doing so, Facebook “sculpts the information landscape according to its business priorities” (Oremus et al, 2021). Considering the previously mentioned large amounts of data available, there is an implied risk of the data being weaponized through the algorithm.

An article considering multiple studies investigating the role of Facebook and *Instagram* in U.S. politics claims that “changing the platform’s algorithm substantially changes what people see and how they behave on the site” (Jingnan & Bond, 2023). One of the studies mentioned in the article found that “about half the posts users see come from like-minded sources” (Jingnan & Bond, 2023) and one out of five users is subject to a news feed “where at least three-quarters of the posts they see come from ideologically aligned sources.” (Jingnan & Bond, 2023). Another study focused on the consumption of political news on Facebook within the U.S.. It concluded that liberals and conservatives don’t have “much overlap between political news consumption” (Jingnan & Bond, 2023) on the platform. Using these findings, the article points out that the Facebook algorithm shows a tendency towards creating political echo chambers, meaning that the content shown to users mostly aligns with their political views.

Echo-chamber-like structures on the internet are not exclusively linked to social media platforms. It can be argued that they had been around ever since people online started to connect with like-minded peers. The previously mentioned GeoCities neighborhoods and webrings serve as examples for structures that encouraged the creation of such echo-chambers. A webring like the *Dykenet DykeRing*<sup>25</sup> for example is likely to attract users who support gay marriage, whereas it is unlikely that users who oppose gay marriage would attempt to participate in such a webring. Considering the findings of the previously laid out article, it could be argued that the same principle applies to platforms like Facebook and their news feed. Someone who engages with content that opposes gay marriage is unlikely to interact with political content that vouches for gay marriage, and vice-versa. However, the critical difference lies within the consequences of interactions and non-interactions in the landscape of algorithm-driven news feeds.

Any user interaction or non-interaction on contemporary social media platforms will contribute to a quantifiable outcome. News feed algorithms have become a staple of commercial social media platforms<sup>26</sup>. Consequently, users will be exposed to new content based on their previous interactions. Before the introduction of these

algorithms, users were required to manually search and interact with new content, in order for it to appear on their news feed. While this is still possible, the results shown to a user who searches for specific keywords are likely also influenced by the news feed algorithm.

While user and content discoverability had been one of the driving factors in the success of social media platforms in the 2000s, the shift from time-based news feeds to algorithm-based news feeds has taken away large portions of user agency. Users no longer have full control over the type of content that is shown to them. At the same time, whenever a user posts something on social media, an algorithm will assign a value to the post, in order to determine whether or not it will be shown to other users. While this raises a number of ethical concerns, such as the effects on political discourse, the spread of misinformation, and the lack of transparency, algorithms also affect how creative self-expression is carried out on social media. Depending on the quantity of interaction that users receive on their related posts, they might feel encouraged or discouraged to engage in certain types of creative self-expression. The quantity of these interactions however, is partially based on algorithmic calculations. While it is up to the individual user to decide whether they feel bothered by the algorithmic intervention in this matter, it has to be acknowledged that through the use of algorithms, social-media platforms are able to affect any user-generated content through their economic interests. Or, to put it simply: Social Media has changed.

## Conclusion

In its current state, the web offers more technical capabilities than ever before. Websites have extended far beyond their unresponsive, static, box-shaped nature of the 1990s. Modern social-media platforms attract large numbers of users, shaping up into billions of registered accounts<sup>27</sup>. There are more ways than ever before to connect with other users online. All of these factors benefit creative self-expression on the web.

As user figures keep rising, the businesses behind contemporary social-media platforms find themselves in positions of increasing power. While there are attempts to study the effects that social-media algorithms have on users, the associated companies only disclose selected information. This prevents researchers from getting an accurate understanding of the inner workings of the algorithms, further cementing the power of companies that run popular social media platforms.

By posting on social-media platforms, users will often give the companies who run the platforms a license that allows them to use their respective content according to the platform's terms and conditions. While it is up to the individual user if or how much

they feel concerned by this, it has to be acknowledged that in many cases users who post on social-media give up large portions of their data privacy.<sup>28</sup>

Users who look to engage in creative self-expression on the web without being subject to algorithms and handing over access to their intellectual property to social-media companies may consider a variety of options. Firstly, there are multiple open-source social-media alternatives such as *Mastodon* and *Bluesky* that offer both data transparency and independence from commercial interests<sup>2930</sup>. Secondly, users may reconsider personal websites. *GeoCities* may have shut down in 2009, however the community still continued to exist on the web. *NeoCities* is a free open-source web hosting service that aims to bring back the spirit of *GeoCities* without engaging in commercial interests<sup>31</sup>. Similarly, many *NeoCities* websites are part of newly formed webrings that are administered by independent communities.

A personal website may be used as a user's standalone web presence, or as a link to their profiles on social-media services. With the advanced capabilities of the modern web, users may shape their website into virtually anything. As part of this process, users may be required to learn a variety of skills, which further increases their ability to express themselves creatively on the web. As artist Laurel Schwulst puts it: "In an age of information overload and an increasingly commercialized web, artists of all types are the people to help. Artists can think expansively about what a website can be. Each artist should create their own space on the web, for a website is an individual act of collective ambition." (Schwulst, 2018). In the case of creative self-expression, the personal website may be the ultimate tool that users of the web have at hand, even in the presence of modern day social-media.

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# Privacy as privilege

*Philip Dissert*

In an era where every click, movement, and keystroke is tracked, the question of privacy is more urgent than ever. Although the concept of privacy is often treated as clearly defined, it is far from straightforward. Its definition is contested in legal frameworks, philosophical debates, and technological systems. As a result, our understanding of privacy depends heavily on context.

Privacy is often seen as a universal right. However, it is unequally accessible in practice. Modern digital infrastructure is largely built to extract, process, and monetize personal data by default. Structural issues such as surveillance capitalism, systematic designs, and power asymmetries are increased by the reduction of individual privacy.

Privacy is important to all of us. It enables self-expression, autonomy, and democratic participation. Privacy protects against profiling, manipulation, and censorship while preventing long-term risks such as authoritarian misuse or data breaches.

This text begins by defining privacy in the literature and explaining why it matters. Then, it will discuss how privacy is contested and how it becomes a privilege for those with sufficient resources of time, education, and finances. Finally, it will discuss the implications of privacy as a privilege and the most prominent counterarguments to privacy.

## What is privacy?

Although privacy is often treated as a universal and clearly defined right, the meaning is strongly contested due to overlapping, diverging, and evolving legal, philosophical, and technological definitions.

Warren and Brandeis called it “the right to be let alone” [Warren and Brandeis (1890)]. However, the main goal of their work was to determine whether “law will recognise and protect the right to privacy”. This definition shows an early focus on personal autonomy and protection from media intrusion. There is no single definition which fits all contexts. Judith states, “right to privacy is itself a cluster of rights” [Thomson (1975)], and similarly, Solove understands it as consisting of “many different yet

related things" [Solove (2002)]. Both of these could be understood as a cluster of related interests.

The definition of DeCew encompasses control over information, independence, self-expression, and the formation of relationships [DeCew (1997)].

A more current definition is from Nissenbaum. She describes privacy as it is not about hiding information, but about the appropriate flow of it. Nissenbaum describes 4 important parameters for privacy: context, actor, information types and the transmission principle. The main argument here is that digital systems violate privacy by not leaking secrets, but by changing norms. For example, when medical data is used by advertisers to better sell products. [Nissenbaum (2010)]

DeCew describes later three dimensions of privacy: Informational privacy, which describes the control over data, decisional privacy, which describes the control over choices and local privacy, which is about the control over an individual's own physical or mental space. [DeCew (2023)]

In many countries, privacy is recognised by the law, but it's still rarely accessible in the real world. Documents like the GDPR and the UN Declaration of Human Rights treat privacy as a human right. Even if it is officially called a human right, the practical implementation is different from country to country. Also, many tech companies have a high interest in reducing attention to this topic. While laws force companies to implement systems to ask for consent, in the practical case, the consent often depends on multiple factors.

## Why does privacy matter?

To understand the consequences of unequal access to privacy, it is first important to understand why it is important to protect privacy, and what could happen if we lose privacy.

One of the most important arguments is the idea of having control over what is known. Without privacy, individuals lose control over how they are perceived. The less you have control over your privacy, the more the perception depends on extrinsic factors. One extreme example would be a system where you are flagged as a criminal because of your roots, friends and education, without any wrongdoing.

Privacy also creates spaces for people to speak freely, explore their identity and express themselves without fear of social punishment, profiling, or censorship. This is essential for a working democratic discourse and artistic freedom, but also for the personal growth of every individual.

It is also important for many to have the chance of freedom from profiling and manipulation. Advertising companies, for example, often know at what time of day you are most likely to buy something. They use that information to profit from you. While many services are “free” for most of them, you, as a customer, are the product they can sell to other companies.

Even for people who are living in democratic societies, trusting governments and companies to be cautious with their personal data, there are risks. Regime changes can happen faster than we think, and if the data is once in the wrong hands, it can be used for persecution of minorities, activists, whistleblowers and other people who are not in line with the current government.

When data is once public, it can’t really be deleted anymore. With record-breaking data breaches [Cheng (2017)], we should assume most information we give to others is public because the risk of it becoming public gets higher the more people, companies and governments we share it with.

## Surveillance

While privacy is often seen as a personal responsibility, in reality, modern digital infrastructure is often built in a way to extract information by default. Surveillance has become a systemic action rather than an exception, especially as governments and organisations collect and process more information than ever.

Governmental Surveillance shows the clearest example of privacy loss. Programs like the PRISM Program of the NSA [Lee (2013)], which was exposed by Edward Snowden in 2013, showed how intelligence companies collected data from major tech companies, including Google, Facebook and Apple.

Also, private companies like NSO-Group sell spyware like Pegasus, which has the potential to infect smartphones, extract messages, extract location data and access microphones. All of this often without the user knowing that it’s happening.

These tools are technically only sold for criminal investigation and national security, but in practice, they have also been misused to target journalists, activists and political opponents. [Marczak and Scott-Railton (2016)]

Even if state surveillance is a big problem, it is only a part of the bigger picture. As previously discussed, today’s capitalist systems are inherently built to maximise data extraction. Zuboff describes “surveillance capitalism” as a system where users’ behaviours are constantly monitored, analysed and predicted for profit [Zuboff (2019)]. Often, mainly for the sake of building “better” products, which fit the users and are adjusted to the individual needs.

Building on the earlier discussion of surveillance capitalism, this section focuses on how these dynamics are embedded in everyday design choices.

One of the most prominent examples is cookie banners. These were originally requested by the law to inform and ask users about consent to share their data and track them across multiple websites. But nowadays, companies use different dark patterns to trick users into accepting more than they really want to share.

Cookie banners often highlight a large, green “Accept All” button, while rejecting unnecessary cookies requires navigating complex menus. These dark patterns undermine the user’s autonomy.

Companies like Meta and Google have so much data on users that they are often able to re-identify people within milliseconds. Lawmakers around the world are bringing laws into place to control the amount of data collected and processed. But even with laws in place, it is often up to the company to comply with these laws. Often, something like a control is missing to verify that companies are only collecting what they say they are collecting. While companies know basically everything about their users, the users and lawmakers often know next to nothing about the companies’ internal systems, algorithms and data collection mechanisms.

Surveillance is not just a technical feature. It determines who can stay invisible and who is exposed. And within this system, not everybody experiences privacy equally.

## The Privilege of privacy

The ability to protect one’s privacy does not only depend on laws, government and companies, but especially on the resources individual persons can allocate towards a more privacy-preserving life. The more surveillance is embedded in our digital infrastructure, the more important access to the right resources becomes. This shift shows the divide between who can opt out of surveillance and who can not.

There are many alternatives to privacy-invasive software. For example, Threema, Proton and Signal have the goal of offering similar services as Google and Meta without being privacy invasive. On the other hand, there are many open-source solutions to have similar software on your own PC, also called Self-Hosting. Here, individuals have the most freedom and can technically reduce their data fingerprint significantly. The problem with those solutions is that, in most cases, the costs are higher in comparison to their privacy-invasive counterparts. Companies like Google and Meta can afford to have low prices for their services because for them, it’s their business model to sell the customer as a product. Privacy, earlier described as a right, is often now a premium feature that only people with enough money can afford.

Another factor is education. Understanding why privacy is important and how to protect privacy requires a certain degree of technical understanding: recognising dark patterns, understanding how to change privacy settings, managing permissions and using alternative tools like encrypted messengers and tools to block trackers. These skills are not evenly distributed. Digitally educated people have a higher chance of being able to understand these requirements. Also, language is often a barrier. While most tools are written in English, approximately only ~18% [Wordsrated (2023)] of the world speaks English.

The factor time is often also overlooked. Protecting privacy is not a one-time task, but rather a constant review of the state of the art and the used solutions. With privacy in mind, people need to be up to date with the Terms of Service and change the permissions of their tools. These tools also need to be updated constantly to avoid security flaws in old software. Especially people with limited time, due to work obligations, caregiving or other factors, are less likely to have enough bandwidth to manage these requirements. The amount of time people have to care for their privacy is not evenly distributed, which leads to another inequality.

Together, these financial, educational, and temporal factors constitute a broader digital divide in which the ability to be private is unevenly distributed. Those people who lack the finances, education or time for privacy are more exposed to manipulation, profiling and control. This shift from a right to privacy to a service changes the meaning of the definition. Privacy, once described as a universal human right, is increasingly reserved for those with money, education and time.

## Consequences

The consequences are not only material, but they also shape how we talk and think. We shift from a shared right to an individual responsibility, from “we all deserve privacy” to “you should have protected yourself”. By that, privacy loss is increasingly framed as individual failure rather than a systemic problem. By framing privacy as a personal responsibility, the structural nature of surveillance is masked.

In that regard, platforms have better chances to avoid accountability and shift the blame to users (e.g. the user pressed the “accept button” or the user agreed to our Terms of Service). By that, the consent becomes a more performative action instead of an informed one, and the narrative protects the platform’s interests while normalising surveillance.

This shift also reinforces a form of inequality, termed by Fricker as epistemic injustice [Fricker (2010)]. This form of injustice describes a systematic exclusion of certain groups from full participation through knowledge practices. In the Privacy context,

that means for some groups that their information is exposed and it is being treated like it's normal or acceptable, while for others, it is assumed that they have the right to stay invisible.

For example, privacy-focused users are often seen as tech "savvy" or "tech-conscious", while marginalised groups such as migrants, low-income households or racialised communities, which have a higher chance of being profiled, get told that the lack of privacy is either inevitable or irrelevant for them.

This inequality implies that some groups have less need or less right to privacy. This is often because their data is seen as already exposed, less valuable, less sensitive or less worthy of protection.

By shifting the collective expectation to an individual problem, we make it harder for many people, especially marginalised ones, to stay in control. This reinforces unfair existing systems and leads, in general, to more inequality. This is the reason why we need to think about privacy as something everybody has and which needs to be protected for everyone by default.

## Counterarguments

While privacy is often seen as an important right, it is not uncommon to hear arguments downplaying its necessity in everyday conversations. These perspectives often focus on small parts while ignoring the bigger picture.

One of the most used arguments against privacy is that "people don't care about privacy". This argument points to the idea that if people really valued their privacy, they would take the necessary actions to protect it. While there are often alternatives to privacy-invasive solutions, people need to allocate resources like time, education and money to be able to use them. For some, it may feel like there are no suitable alternative solutions, because the amount of time they have to spend to understand them is too large. Resignation and fatigue are common responses for systems it is hard to opt out of. While some individuals may really not care about their privacy, the bigger question is, what is the reason behind that thought?

Another often-used argument is stating that "transparency is good". While transparency for governmental processes, legal decisions and politics, for example, is good for people to improve trust in the existing systems, exposing the privacy of every individual leads to systems of complete surveillance. It is often argued that for better general security, more information needs to be public or at least accessible to certain intelligence services or police departments. While more information in theory could lead to a faster intervention in case of problems, we should ask whether the amount of data which is collected is proportionate to the risk we impose on all

people by collecting their information. While the transparency of institutions improves the reliability of democracies, the surveillance of every individual imposes a big risk of misuse, especially against minorities or opponents of the current government.

Also, it is often argued that strong privacy regulations slow down tech developments and limit the government's efficiency. The idea is that through the amount of regulations imposed on companies and the government, the work which needs to be done to have a competitive advantage gets larger the more privacy is requested. While privacy may slow down some of these developments, it prioritises the interests of the state or big companies over human dignity and autonomy. Innovation without ethical constraints often leads to the reinforcement of exploitation. While rich people profit even more from fewer privacy regulations, the poor often need to adjust and comply without having any agency.

The attitude towards privacy is often cultural and not universal. While Germany, for example, is highly privacy-conscious due to its past, China embraces control. These true values can differ from country to country, but they don't negate the structural harm which is caused by surveillance in these contexts. Inequality in basic human rights can not be justified by cultural differences. Privacy protection should be a general right in contrast to an option, based on a country's history or past.

## Implications

When privacy is under attack, it is not just about data - It is also about how people express themselves, how powers operate and who is protected in a digital space. The risks are not just for the single individual, but for society as a whole.

If privacy becomes a luxury good, how can it then be a human right? Reality demands more than awareness - it calls for action. If we want to claim privacy back as a universal right, we need to stop treating it as a personal matter and demand a systematic change. Designers, policymakers and educators all share the responsibility to create digital environments where privacy is not an opt-in feature but is given by default. Rethink the general structure of systems to build them in a way that protects privacy from the start and not as an afterthought. Challenge explorative business models and strengthen legal protections of individuals while giving strict regulations for businesses on how to work with data. The right to privacy should not depend on any privileges, nor should it be the burden of an individual - it should be built into the structure of the digital world itself.





## Conclusion

Privacy should not just be a personal concern, but rather a general right everybody has. The systematic nature of surveillance capitalism, state surveillance and exploiting digital infrastructure is often masked by shifting the blame to the individual. Even if laws exist which declare privacy as a basic right, the accessibility is unequally distributed through resources like finance, education and time. This constant surveillance impacts democratic participation, personal autonomy and the freedom of expression. It shapes how we think, speak and interact with digital environments. By shifting the narrative from a universal right to the individual failure of a single individual, corporate interests and inequalities are masked under a façade. To reclaim privacy as a universal right, structural changes in law, business models and education are needed. Privacy should be something that everybody has by default. Individuals should be able to decide if they want to share their private information with others, and not the other way around.

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# Magical AI Sparkles

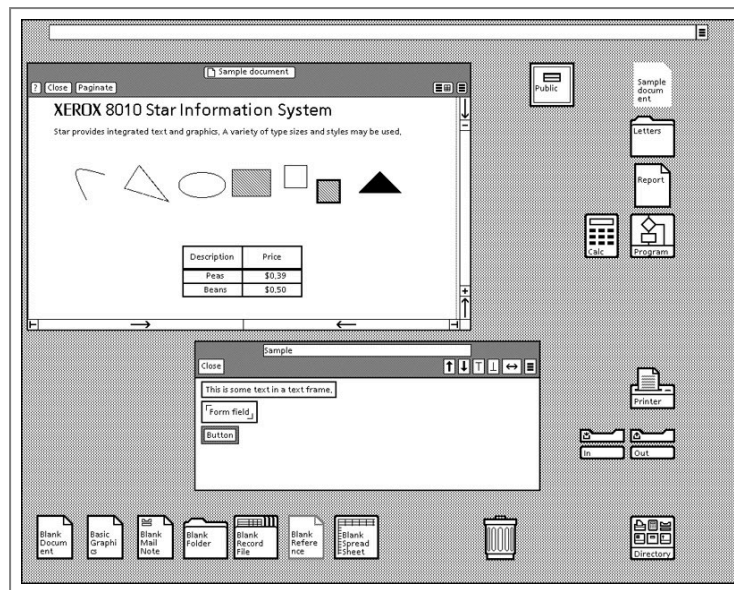
## On magical imaginaries in AI's branding semiotics

*Paul Kellert*

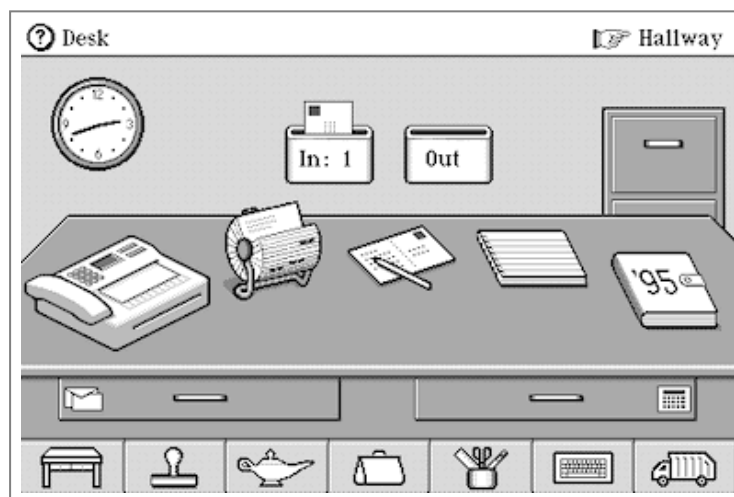
Since the conception of graphical interfaces the use of icons to represent features in software has been an established design practice. The new semiotic vacuum of Large Language Models (LLMs), Image Generators (IG) and other generative AI features are now being leveraged to shape the perception and encourage the use of Neural Networks (AI here denotes the group of learning algorithms which operate probabilistically, and grouped under Machine Learning, which can be prompted to receive an output in text, image and audio derived from its training data set). The approximation to religious imagery and fantastical imaginaries in recent design trends shows Big Tech's growing influence and cutback on professionalism in their services.

## Let Icons Be Bygones

Icons gave rise to the GUI (Graphical User Interfaces) in computers. The ability to connect represented objects with features of a software greatly increases accessibility in contrast to the text based command-line interfaces of the early digital computers and for most people became inseparable to computers. Most icons that are still in use are derived from the first GUIs, like the XEROX STAR 8010 from 1981. Because the technology was brand new, most of the visual elements were designed as icons, to function as different metaphors to make use of knowledge that users already had from other domains, such as an office space, using skeuomorphic elements like the desktop, trash cans, folders and calculators.



XEROX STAR GUI



Magic Cap OS GUI

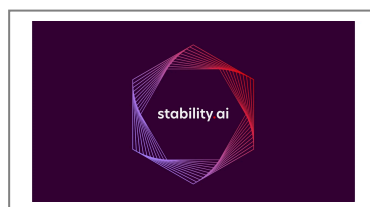
Most icons have stayed the same, like the floppy disk, even though their skeuomorphic counterpart is no longer part of our daily lives. Over the course of time, with rising availability and influence, some icons (icon here now means the representation of a software's feature; and don't have to represent and object anymore) became symbols—got abstract and even without a counterpart, like hamburger menus. Consumer AI models propose a new semiotic challenge, as there is no established intuitive metaphor for generative features. Although there is a long history in research about machine learning, the recent boom of publicly available generative AI, provided by both non-and for-profit organizations has created a demand for consumer friendly branding and advertising, accessible and trendy looking interfaces (and therefore symbols for their icons), in an incentive to become and remain publicly relevant.

## Blossoms or Buttholes?

When looking at the AI tech bro bubble, there is an imaginary crystalizing, consisting of metaphysical and fantastic notions: *“We believe Artificial Intelligence is our alchemy, our Philosopher’s Stone – we are literally making sand think. We believe Artificial Intelligence is best thought of as a universal problem solver. And we have a lot of problems to solve.”*<sup>1</sup>. The notion that AI is something supernatural with magical capabilities has not only led to the first religions centered about AI (like Anthony Lewandowski’s Way of the Future<sup>2</sup>), this notion is finding its way into mainstream discourses as well<sup>3</sup>. AI is becoming increasingly anthropomorphized in everyday language (in everyday sentences like “I asked ChatGPT and he told me”), but even more is the mystification of it taking place in our techno-cultural discourse. This also manifests in the mainstream design language: OpenAI was one of the first organizations whose publicly available models gained rapid and wide recognition with the release of GPT3.5 in November 2022. OpenAI’s logo has since been copied until it became a memeable mainstream canon. The circular, mostly overlapping and intertwined array of lines that form a symmetrical ring (what OpenAI calls “blossom”<sup>4</sup>), and its countless clones have become ubiquitous. With it, the critique has emerged they look like anuses<sup>5</sup>.



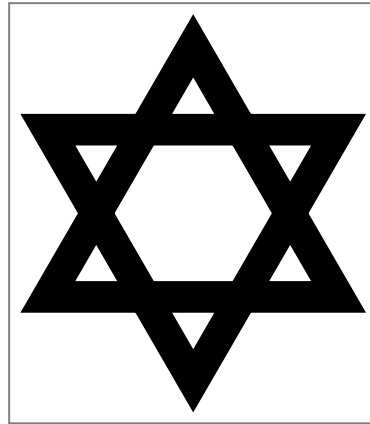
ChatGPT Logo



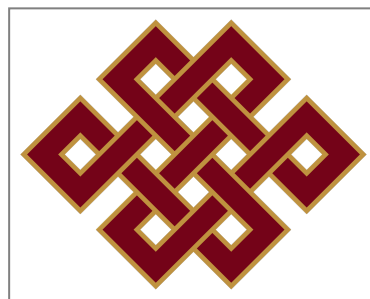
Stability AI Logo

*In this I see critique about this design language, as those symbols are too complex and non-objective to establish a meaningful and recognizable semiotic connection. Also the opposition’s sentiment that tech-bros are “ass-holes” or “ass-crawlers” lingers around: “If you’ve ever talked to an AI worshipper, it’s a fitting description of who they market their services to”*<sup>6</sup>. The mention of worshipper here underscores

the sentiment I described previously. On the other hand, symmetry and centered arrangements (perceived as something complete) as in the star of David or Dharma Wheel, and the interlacing/weaving of shapes (conveying intertwining and infinity) as in the endless knot are also aspects commonly found in religious symbols.

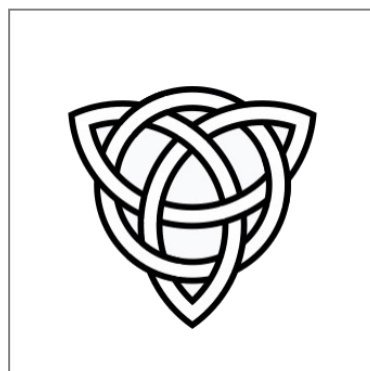


Star of David



Endless Knot

In the case of the logo of *Way Of The Future*, the borders have been completely dissolved. I argue that this trend did not just become popular due to the dynamics of trends and hypes in capitalism, but also because the approach of metaphysical imaginaries is gaining popularity within the tech bubble.



Way Of The Future Logo



## Twinkle, twinkle, little star ✨

With this trend just a while back, a different symbol has been inserted for hyping up generative feature icons for some models: the sparkle, mostly drawn as a four cornered star with round edges.



Gemini Logo



Adobe Firefly Logo

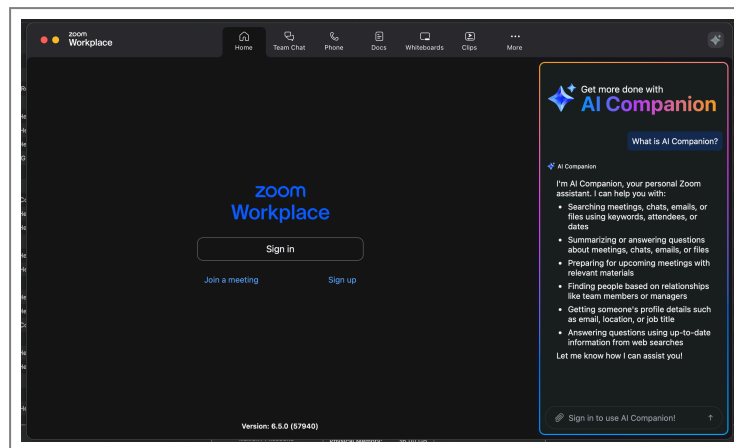
Either by itself or an assembly of usually one to four of them added to a previously existing feature are used to indicate the new version of a tool, having any kind of AI feature in it. Sparkles are a visual element that is added to objects or people to communicate that they are new, had a makeover, are just very special or magical. In some media, mostly cartoons, anime and comics, especially the ones that have a positive and non-harmful magic system, sparkles are used to represent magic itself.



Sailor Moon, popular manga character

## Interfaces In Our Faces

Interfaces not only allow for the invisible to become visible, but can also be used to nudge certain behaviors of users with making features less or more accessible, highlighting or rewarding certain features. Bruce Tognazzini already talked about the intersection of show magicians and computer interfaces in the 90s: *“Showmanship is the gentle seduction of the users, leading them to accept, believe in, and feel in control of the illusory world we have built for them”*<sup>7</sup>, a concept Peter Prevos still sees almost thirty years later, with the difference that there are robots performing magic shows at this point<sup>8</sup>. Never before was the connection of magical showmanship and interfaces more on the nose. Having entered a post-truth age, the (in this case taken literal) enchantment through emotional and aesthetic manipulation have become mainstream political and economical strategies. To popularize AI with nudging the use and hype, many interfaces have been redesigned to highlight AI features, for example with emphasizing them using vivid colors that grab the users attention and gradients that have a visually soothing effect that does not tire the eyes as quickly as using solid colors. Big tech companies have the working population as their target group and therefore adjust their design to the mainstream preferences of Millennial and GenZ people.



Zoom Interface

Google takes it a step further and runs Gemini on every Google search by default, displaying it as the first result (unless manually deactivated, by solutions like adding “-ai” to searches or even defining {google:baseURL}/search?udm=14&q=%s as your default search engine in your browser application;). This forced exposure to a convenience naturally establishes habits and later dependencies in users. As Joshua Neves and Marc Steinberg claim, “[a] convenience consolidates the platformization of culture, surveillance capitalism, data regimes, conscription into debt, among other infrastructural expedencies” as they “may begin as a minor time-saving ritual or an aspiration but quickly becomes common sense, ‘just the way things are’”<sup>9</sup>

## It's A Kind Of Magic

In the new movement of the mystification, the magic sparkle is the next step in the evolution over the religious looking blossom-butthole logo. Although not a new symbol, the sparkle communicates something and plays into an already established cultural canon. These semiotics are consciously chosen, highlighted by the fact that the logo of the only globally known Chinese model, DeepSeek is simply a non-magic whale. The view on magic here is already a specific one: AI magic does not include the values and aesthetics of western interpretations of Voodoo, Wicca or Dark Fantasy, since they have a rather two-sided view on magic and its powers, featuring components of violence, sacrifices and the possibility of corruption and loss of control. For example, in the imaginaries and world building and aesthetics of the video game *Soul Sacrifice*, magic is both a power which sorcerers harness to fight evil in the world, but which can also lead to their own corruption into uncontrollable beasts.



Soul Sacrifice's gameplay is also built on the mechanics of sacrificing a defeated beast's soul, with the possibility of making the player stronger, but at cost of health

When talking about the magical imaginary of AI, it is clear that more one-sided and positive imaginaries are selected, like Disney's Cinderella. In the movie, the main character, who usually is excluded from social interactions, is granted a chance to win the favor of the prince by a fairy. She enchants her and makes a beautiful dress appear. Media like Cinderella use magic similar to a deus ex machina storytelling device, to solve the "good" characters' problems.

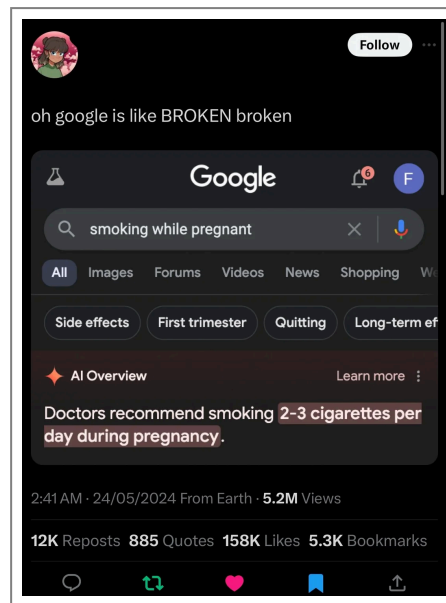


Cindarella and Fairy God Mother



## Why all that glitter?

The enchanting imaginary of AI as magic poses a threat to the critical reflection of technologies. Magic is an immaterial, impeccable, cryptic and independent force, at least in the Disney-esque aesthetic and understanding that is conveyed. These overly possible properties are to hide away the current flaws of AI technology. Magic as an immaterial force is imagined to exist on a different plane of reality, beyond our physical workings of this world. But the technology is very much tied to the real world, because the production and maintenance use up real world resources, which produces emissions and is dependent on the exploitation of real workers from the global south. Training an LLM can emit quantities in scale of 284 tons of CO<sub>2</sub><sup>10</sup>, let alone the use of energy and therefore resources it takes to operate them. With Google Gemini running, a search uses up to 30 times<sup>11</sup> more energy than one without. The increased training and use of AI tech has increased global demand for energy, the costs of which are increasingly forwarded to the civil population<sup>12</sup>. The labelling and annotation of training data is outsourced as “ghost work” to exploit workers, most of which are from the global south<sup>13</sup>. Magic is also often imagined as perfect, an ancient wisdom that can solve problems. The impeccability of AI is another myth the providers of the technology aim to upkeep, although it keeps reinforcing and even exaggerating sexist, racist and other biases represented in their dataset<sup>10</sup>. Also with the vast amount of generated content on the web, models are starting to feed on its own creations, leading to so-called AI hallucinations<sup>15</sup>. As AIs have little critical mechanisms, they are also likely to list fake news or non-credible sources as their output<sup>16</sup>.



Gemini sting smoking during pregnancy is recommended

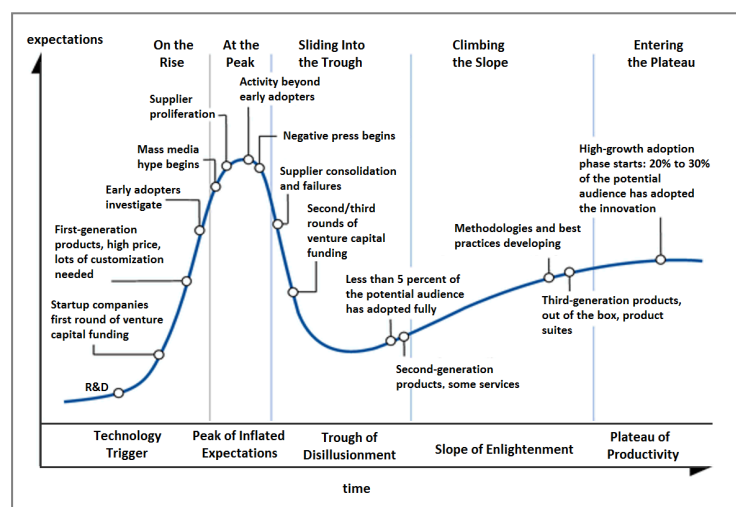
This also ties in the cryptic aspect of magic, and to the imagined unexplainable complexity attributed to it. Although deep learning has created models with black boxes that are seemingly impossible to understand, the basic procedure of deep learning and datasets are graspable. Datasets' contents are still being created and labeled by (exploited) humans<sup>17</sup>. Immaterial magic is also something that has to be summoned, called upon, as it is out of your physical reach. The need for users to reach upon an independent entity can take away their feeling of agency and capability. This narrative fits so well because most models are provided as services to be used, mostly on external servers, so they cannot be taken home and owned. Guy Debord argues that the spectacle changes world views and can be used for distraction: *"The spectacle aims at nothing other than itself"*<sup>18</sup>. The platformization (mainstream's movement to monopoly social media services) came together with a time, where the spectacles became a mainstream way for discourses of all kinds, sometimes preferred over well researched or engaging media: Fake news, Brainrot and AI slop have become the spectacular enchantments of our post-truth time. With the current hype and mystification, the "summoning" of generative models can be seen as one, the way some marketing makes it look like a mass movement<sup>19</sup>. As mentioned, AI generated content is epistemologically unsafe and comes from a single source, but is visually marketed as a powerful metaphysical entity that solves your issues.





## Infinite Money Glitch

The general promises of AI to transform markets and reel in massive profits or simply to save on wages in replacing human workers (like Duolingo has recently announced<sup>20</sup>), has given rise to a trend of major investments of venture capital<sup>21</sup>. Bubbles and trend cycles have established themselves as essential mechanics in capitalism: “[W]hen you’re pitching culture projects to patriarchal joints that find the idea of ‘culture’ unmanly, I’ve often found that ‘technology’ seals the deal.”<sup>22</sup> What was the dot-com bubble in the late 90s<sup>23</sup>, can be already observed today.



Hype Cycle

Besides the incentive to remain relevant, appeal to trends, secure shareholder investment and use in civil population, recent geopolitical research races in AI demand for developments in the technologies: “[T]he goals of economic prosperity, social improvement, international status, and military security through investment in AI are seen as synergistic – technological leadership contributes to all these goals at the same time”<sup>24</sup>. Governments are willing to offer massive funds to secure national and international control<sup>25</sup>.



## Indistinguishable From Magic?

Although Arthur C. Clarke's law of advanced technology being indistinguishable from magic<sup>26</sup> is a notion that is voiced increasingly, it is nothing new. New technology, especially computers have been subjected many times to magical imaginaries: the act of hardening iron to steel was practiced already by the ancient Greeks, who attributed magic properties to it, as Sophocles *"described a soul as 'hardened like immersed iron'"*<sup>27</sup>, for lack of better scientific understanding. In earlier days of computer technology, the imaginary was shared by communities of users and mostly in a humoristic manner<sup>28</sup>. In the current trend, big tech companies started proliferating that imaginary, which has to be seen critically because it ultimately influences the behavior of people and public images to profit from it. The phenomenon of AI black boxes also further adds to the mystification of tech, Yannick Fritz argues that the rhetoric of the black box is part of *"conspiracy theory sentiments in which AI is an occult power that cannot be studied, known, or politically controlled"*<sup>29</sup>. This will only be proven by time, but most of new technologies had to be studied for a time before being understood well enough. Sebastian Schöner argues with his principle of *"Computers don't involve magic"* that everything digital can be dissected and understood, therefore built by oneself<sup>30</sup>. Scaling this idea to large neural networks, one could argue that with access to the dataset, the energy, the infrastructure (and billions of Dollars) and the software used for training, models could also be replicated. There is undoubtedly excitement about new technology (or anything new in that sense), as I would argue the fewest people still deem the calculator a magical artifact. This phenomenon is accelerating quickly, as for example generated images from DALL·E mini in 2022 can be deemed ridiculous compared to the newest IGs. This begs the question how this imaginary will be perceived in a decade, or even already a few years. I call for making a divide of genuine wonder about the truly amazing achievements of technical possibility and the pure unfathomable wonder of magic, that novelties cannot be instrumentalized to generate unreflected hypes with real world consequences.

## Conclusion

In creating the imaginary that AI is magical, companies hope to lay off responsibility, decrease critical engagement, lure in new users and then make them dependent. User interfaces strengthen this dependency by making AI features ubiquitous and rewarding. This erodes critical thinking in populations, as it is making research and fact checking a conscious effort. The sparkles of novelty currently shining on AI might also fade as investments decrease or bubbles burst. Maybe it was just a nice

polishing for the shiny new products companies wanted to produce as long as funding lasts. What is clear is that AI technology is here to stay (one way or another), as it has been flying under the radar even before the availability of GPT or Stable Diffusion. But the broad use of the technology in this scale is new, so vacuums and inconsistencies in semiotics, work ethics and even ourselves still prevail for a while. We are at the tipping point of defining shared canons and rules. In the development of approximation of religious imagery, magical imaginaries and the strong encouragement and advertising of AI, I see the dangers of a world that is increasingly post-truth, uncritical and dependent on external services for daily interactions. The critical engagement and uncovering of AI's real world impact on climate, exploitation and the methods of sensemaking of our societies is connected to fighting the conveniences the technology offers us, but could lead to a more just and sustainable future.



Is this swimming pool made of AI?

## Notes

1. see under "Intelligence" of The Techno-Optimist Manifesto (<https://a16z.com/the-techno-optimist-manifesto/>)↔
2. Church of AI Makes A Comeback After Two Years (<https://interestingengineering.com/culture/church-of-ai-makes-a-comeback-after-two-years>)↔
3. Mike Israetel on GPT (<https://www.youtube.com/shorts/RqGwsrftPo>)↔
4. see OpenAI Brand Book (<https://openai.com/brand/>)↔
5. Why do AI company logos look like buttocks? (<https://velvetshark.com/ai-company-logos-that-look-like-buttocks>)↔

6. Reddit, r/technology, Comment on "Why do AI company logos look like buttoholes?" ([https://www.reddit.com/r/technology/comments/1jwz6pb/why\\_do\\_ai\\_company\\_logos\\_look\\_like\\_buttoholes/](https://www.reddit.com/r/technology/comments/1jwz6pb/why_do_ai_company_logos_look_like_buttoholes/))↔
7. Tognazzini, Bruce "Tog." 1993. *Principles, Techniques, and Ethics of Stage Magic and Their Application to Human Interface Design*, Proceedings of INTERCHI, (Amsterdam, The Netherlands, April 24-29, 1993). ACM, New York, p. 355-362.↔
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9. Neves, Joshua Neves; Steinberg Marc. 2024. *In/Convenience: Inhabiting the Logistical Surround*, Institute of Network Cultures, Amsterdam, p.5-9↔
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13. The Exploited Labor Behind Artificial Intelligence (<https://www.noemamag.com/the-exploited-labor-behind-artificial-intelligence/>)↔
14. AI's Bullshitting Obscures Who's to Blame for Its Mistakes (<https://www.scientificamerican.com/article/chatgpt-isnt-hallucinating-its-bullshitting/>)↔
15. <https://www.snopes.com/news/2024/05/29/google-ai-feeling-depressed/>↔
16. [Noosphere Manifesto] (<https://fritz.ai/noosphere/>)↔
17. Debord, Guy. 1967. *Society of the Spectacle*↔
18. see Google Gemini Ad ([https://www.youtube.com/watch?v=\\_fuimO6ErKI](https://www.youtube.com/watch?v=_fuimO6ErKI))↔
19. Duolingo will replace contract workers with AI (<https://www.theverge.com/news/657594/duolingo-ai-first-replace-contract-workers>)↔
20. AI dominates venture capital funding in 2024 (<https://www.fdiintelligence.com/content/41641e67-f00f-53c0-97cb-464b3a883062>)↔
21. A Brief History Of Technology Worship (<https://www.wired.com/story/a-short-history-of-technology-worship/>)↔
22. The Late 1990s Dot-Com Bubble Implodes in 2000 (<https://www.goldmansachs.com/our-firm/history/moments/2000-dot-com-bubble>)↔
23. see under Technopoles in a Geopolitical Innovation Race (<https://www.tandfonline.com/doi/full/10.1080/14650045.2025.2456019#abstract>)↔
24. Trump Taps Palantir to Compile Data on Americans (<https://www.nytimes.com/2025/05/30/technology/trump-palantir-data-americans.html>)↔
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26. Varoufakis, Yanis. (2023), *Technofeudalism*, The Bodley Head, p.3-6↔

27. [In Technomancy, James Paige jokingly imagines the computer as imprisoning a magical imp]  
(<https://james.hamsterrepublic.com/technomancy/>)↔

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# From Imitation to Simulacra

## Rethinking the Imitation Game through simulation Theory

Yang Linhui

In his well-known paper “Computing Machinery and Intelligence” (1950), Alan Turing proposes replacing the metaphysical question “Can machines think?” with a more practical one: “Can machines imitate humans well enough to be indistinguishable from them in a text-based conversation?” This test, now called the Turing Test, shifts the focus from what thinking is to what thinking looks like from the outside. Turing argues that this move avoids vague discussions about consciousness by focusing instead on observable behavior.

However, this shift comes at a cost. In the imitation game, communication is limited to a technical interface, for instance, a typewriter or a computer, that excludes the human body and voice. The person must adapt to machine conditions. This changes the very structure of the interaction. It’s no longer just about a machine pretending to be human — it’s about a human also adjusting to the system. I call this kind of setup a hyper-interactive simulation: a form of simulation that requires active human participation and adaptation.

In this paper, I want to distinguish between imitation, simulation, and interactive simulation, with a focus on the role of human agency and the representational relationship. I ask and try to answer: How much does the game depend on human cooperation? And does a simulation like the Turing Test still represent thinking — or has it already created a separate kind of reality?

To explore these questions, I proceed in three steps: (1) I analyze the structure of the imitation game. (2) I develop a distinction between imitation and interactive simulation. (3) I argue that some simulations, like the Turing Test, no longer function as representations of thought but instead create realities of their own — a process that can be understood through Jean Baudrillard’s concept of *simulacra*.

## 1. The Imitation Game

The imitation game was introduced by Turing in his paper *Computing Machinery and Intelligence* (1950), which later became the widely known Turing test. About the idea of the game he writes:



*It is played with three people, a man (A), a woman (B), and an interrogator (C) who may be of either sex. The interrogator stays in a room apart from the other two. The object of the game for the interrogator is to determine which of the other two is the man and which is the woman. He knows them by labels X and Y, and at the end of the game he says either "X is A and Y is B" or "X is B and Y is A. The interrogator is allowed to put to question A and B ... In order that tones of voice may not help the interrogator the answers should be written, or better still, typewritten. The ideal arrangement is to have a teleprinter communicating between two rooms. Alternatively the question and answers can be repeated by an intermediary. We now ask the question, "What will happen when a machine takes part of A in this game?" Will the interrogator decide wrongly as often as often when the game is played like as he doe when the game is played between a man and a woman? These questions replace our original, "Can machines think?"<sup>1</sup>.*

So Turing replaces the question "Can machines think?" from a metaphysical to an epistemological one: "How can we know if a machine can think?" He offers a criterion: If the interrogator decides wrongly as often when the game is played like this as he does when the game is played between a man and a woman, then the machine passes the imitation game. It would follow, according to Turing, that the machine can think. As Turing says this shift has the advantage of avoiding to answer the question of the ontological nature of thinking and the advantage of drawing a fairly sharp line between the physical and the intellectual capacities of a man<sup>2</sup>.

The cost of these advantages is that the game must be arranged with an interface or, in Turing's words, "a teleprinter communicating between the two rooms"<sup>3</sup>. It demands that the interrogator as the imitated objects at the same time in the imitation game stand in an interface that did not exist before. Contrary to Turing's suggestion that this setup merely removes vocal cues — "in order that tones of voices may not help the interrogator"<sup>4</sup> — it actually forces the human to enter the machine's framework. The goal becomes not simply imitation, but ensuring the conditions under which the machine can simulate human thinking. At this point, the operation of the machine is no longer a matter of imitation. I argue for a distinction between this form of simulation and genuine imitation. And I introduce the concept of interactive simulation in order to distinguish this kind of simulation from other simulations.



## 2. Interactive Simulation versus Imitation

Before introducing the concept of interactive simulation it is necessary to briefly outline my point of view in relation to computer simulation. *The Stanford Encyclopedia of Philosophy* distinguishes two main approaches to defining “simulation”<sup>5</sup>.

The first approach understands computer simulation to be fundamentally about using a computer to solve the mathematical equations of a model that is meant to represent some system. The second one begins with a general definition of simulation independently of the notion of computer simulation, and then to define “computer simulation” compositionally as a simulation that is carried out by a programmed digital computer. An example of the second approach is from Hartmann, he defines at first simulations as dynamic models, then computer simulation as such simulation run by a computer:

*A model is called dynamic, if it. . . includes assumptions about the time-evolution of the system.. . . Simulations are closely related to dynamic models. More concretely, a simulation results when the equations of the underlying dynamic model are solved. This model is designed to imitate the time evolution of a real system. To put it another way, a simulation imitates one process by another process. In this definition, the term “process” refers solely to some object or system whose state changes in time. If the simulation is run on a computer, it is called a computer simulation<sup>6</sup>.*

My position principally aligns with the second approach. However, my focus lies on an aspect that is overlooked by above both approaches: the status of human agency in the simulation process. As Asero has shown in his exegesis of Pickering’s concept of “normative disciplinary agency,” computer simulations exhibit a form of agency. However, this agency is not completely independent of human involvement. Rather, it depends on human agents who are willing to conform to the simulation’s normative rules and disciplinary constraints<sup>7</sup>.

In short, human agency refers to the capacity of individuals to make decisions or take actions that can influence the world around them. I aim to discuss the varying degrees of reliance on human agency in different types of reproductive operations, where human capacity serves as a referent. The following table provides examples of various reproductive operations and aims to illustrate their differing levels of dependency on human agency:

Operation	Example	human involvement	Dependency on human agency
Imitation	parrots imitate human speaking	yes	no
Simulation	Simulation of a chess game played by 2 persons	no	low
Interactive imitation	Alpha Go	yes	high
hyperInteractive imitation	Imitation game	yes	very high

In the first two examples—the parrot’s imitation of speech and the simulation of a chess game between two human players—human agency is either absent or not essential to the functioning of the system. Even if humans are involved, their active adaptation to the system’s rules is not required.

By interactive simulation<sup>8</sup>, I refer to a type of simulation in which human engagement is essential and the simulation is no longer self-contained, as is the case with many traditional simulations. By interactive simulation humans are not external observers but participants who help constitute the very course of the simulation. AlphaGo, for instance, is not merely a computational imitation of a scene of two people playing Go as the second example, but a structured interaction requiring participants to adapt to a rule-bound environment. Human beings need to play with the machine, otherwise the simulation can not take place. But human beings still need to obey the rules of chess although the opponent has been replaced by a machine.

He uses interactive simulation to distinguish this type of simulation from the purely representational simulation. He also considers the difference between a computer simulating how two persons played a chess game and a computer simulating how a human would play chess by actually playing chess with a human<sup>9</sup>.

The situation in the Imitation Game is even more complex, because people are actually the imitated objects of the computer. Or more cautiously the cognitive capacities are the imitated objects. However the interrogator and player need to adapt their behavior to fit the system’s rules. I term this a hyperinteractive simulation, because the original referent in reality-human intelligence, becomes indistinguishable from its simulation within the system.

There is an advantage to making a careful distinction between the interactive simulation like in the Turing test and imitation. While imitation typically refers to the reproduction of certain features or behaviors of a target system without requiring the target’s cater, interactive simulation like in Turing test demands not only a

participation of human beings but also the imitated object itself within the simulation framework. The crucial distinction to be made between them is that interactive simulation incorporates the human subject not merely as an external referent but as an active element within the simulated process—yet one whose agency is constrained by the interface and rules designed by the machine. This setup requires a human agency willing to conform to its normative rules and disciplined constraints.

Unlike passive imitation in sense that the imitated object is passiv, interactive simulation reconfigures the role of the imitated: not only as the model to be reproduced, but as a constrained co-participant whose interaction is necessary for the simulation to function.

It is now legitimate to ask following questions:

- Are we testing the machine — or just human's ability to adapt to machines?
- Are we training ourselves to accept things that "look like humans" as "humans"?
- Are humans gradually becoming supporting roles and inputs to simulation systems?
- If simulation has consumed the "real" reference, does the "real human mind" still have meaning?

### 3. When Simulation doesn't work as a representation

A further problem in the imitation game is this: if the operation qualifies as imitation, what exactly does the machine imitate or represent?

As already suggested in the earlier paragraphs, the imitation game was never meant to investigate the nature of human intelligence. On the contrary, it strategically avoids the ontological question by replacing it with a behavioral criterion: Can a machine's responses be mistaken for those of a human? The Turing test therefore does not represent what thinking is; it only aims at reproducing its effects under restricted conditions.

Yet the simulation still relies on certain assumptions about what it means to think — assumptions that, while not ontologically justified, are functionally necessary. Without them, no simulation of "thinking" could be generated. Even if the simulation no longer corresponds to a metaphysical idea of mind, it still presupposes something about human cognitive behavior to function as a simulation.

Jean Baudrillard's analysis of simulation and simulacra can help illuminate this issue. At the beginning of *Simulacra and Simulation*, he quotes the Ecclesiastes: >The simulacrum is never what hides the truth - it is truth that hides the fact that there is none. The simulacrum is true. -Ecclesiastes<sup>10</sup>

Baudrillard famously claimed that simulation is no longer the copy of the real, but the generation of a real without origin. In this sense, the Imitation game is not an imitation of the mind, but a prototype of what Baudrillard would call the simulacrum. It enacts thinking not by mirroring a pre-existing essence, but by producing a convincing behavioral effect — a “hyperreal” that replaces its supposed referent.

*Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal.<sup>11</sup>*

So far I show that hyperreality and the hyper interactivity as two essential characteristics in the imitation game.

## 4. Conclusion

In this article I rethought the imitation game using simulation theory guided by the questions posed in the introduction: How much does the game rely on human cooperation? And does a simulation like the Turing Test still represent thinking — or has it already created a reality of its own?

I analyzed the structure of the imitation game to reconstruct its core idea and to explain the necessity of its setup — especially the role of the interface, which forces both the interrogator and the player to enter the framework of the test.

Then I introduced a distinction between imitation and interactive simulation. Unlike simple imitation, simulation requires a human agent who agrees to follow its rules and submit to its constraints. Compared to many other simulations, the imitation game depends heavily on human cooperation.

Finally I used Baudrillard’s concept of *simulacra* to describe simulations. These simulations no longer reflect something outside themselves, but instead create realities of their own.

Unlike imitation, in which the original model remains untouched, interactive simulation reconfigures the entire relation between model and referent. It no longer simply copies reality, but rather absorbs it into a mutually transforming interface. The human subject becomes part of the system, and the system becomes part of the human experience. This fusion collapses the boundary between the simulated and the real.

Although AI today has achieved remarkable progress in emulating human thought, I call attention to the status of our own agency:

Are we testing the machine — or testing our own ability to adapt to machines? Are we training ourselves to accept things that “look human” as if they are human? Are humans gradually becoming supporting characters and input data for simulation systems? If simulation consumes the “real” as its referent, does the “real human mind” still matter?

## Notes

1. A.M. Turing (1950) Computing Machinery and Intelligence. *Mind* 49: 433-460. P.433.↵
2. Turing 1950, P.434.↵
3. Turing 1950, P.433.↵
4. Turing 1950, P.433.↵
5. Eric Winsberg, “Computer Simulations in Science”, *The Stanford Encyclopedia of Philosophy* (Winter 2022 Edition), Edward N. Zalta & Uri Nodelman (eds.) n.p.↵
6. S. Hartmann (1996) The World as a Process: Simulation in the Natural and Social Sciences. In R. Hegselmann, U. Muller, and K. Troitzsch, eds., *Modelling and Simulation in the Social Sciences from the Philosophy of Science Point of View*, 77–100. Dordrecht: Kluwer Academic. p. 82.↵
7. Peter Asaro (2008) Computers as Models of the Mind: On Simulations, Brains and the Design of Early Computers, Center for Cultural Analysis, Rutgers University Department of Media Studies and Film, The New School University, P.5.↵
8. Napoleon Mabaquiao (2011) “Computer Simulation of Human Thinking: An inquiry into its Possibility and Implications.” *Philosophia: An International Journal of Philosophy* 40(1): 76-87. P.82-82.↵
9. F. Popper is may be the first one to use the Terminus interactive simulation for theory of media art. see: *Art of Electronic Age*: P.115.↵
10. Jean Baudrillard (1981) *Simulacra and simulation*. Originally published in French by Editions Galilee, P.1↵
11. Baudrillard 1981, P.1↵





# On thinking machines and their relation to discourse

Paul Boeninger

Can two computers communicate with the complexity required to count as discourse? In this essay, I will explore that question not just technically, but philosophically. I use *Michel Foucault's* definition of discourse as a foundation—not merely as communication, but as a system of knowledge—a set of rules and power structures that determine what can be said, thought, or known within a given historical and cultural moment. Rather than treating artificial intelligence (AI) as neutral or merely novel, I examine its potential role in such a system: Can AI take part in discourse and, if so, should it? I focus primarily on the first question, breaking down whether modern computational systems, specifically large language models, meet the conditions necessary to participate meaningfully in discourse. This includes reflecting on their conversational capabilities, their limits in creativity, and their relation to power, truth, and meaning. In the final section, I deliberately shift perspective: assuming that one day AI could participate in discourse, I ask: why might we still want to keep them out? This is not a technological analysis. It's a philosophical one – about authorship, responsibility, and what it means to think.

## What is a discourse?

In academic theory — especially in the work of Michel Foucault, “The Archaeology of Knowledge”<sup>1</sup> – the term discourse refers not just to language or conversation, but to structured systems of knowledge that define how we speak, think and understand the world. A discourse consists of statements, rules and practices that shape what can be said, who can speak and what counts as truth within a specific domain, such as medicine, law or sexuality. Foucault argues that discourse is always linked to power: it produces knowledge, legitimizes authority and defines what is normal and what is not. For instance, in medicine we define what is considered an illness and what is not. Importantly, discourse is not fixed or universal but historically and socially contingent, changing over time and across cultures. It is shaped and maintained by institutions, experts and technologies that govern how knowledge circulates. Understanding discourse in this way is crucial when considering whether artificial intelligence can or should take part in it. Participating in discourse involves more than generating language – it requires context-awareness, understanding of historical context and a

position within systems of knowledge and power. Based on that we can take an approach on whether computers are capable of having a discourse and whether we have an interest in involvement or exclusion of them.

## Can computers produce discourse?

If you put two smartphones in one room and both have access to a *large language model* (LLM), used by an “*Artificial Intelligence*” capable of text-to-speech and speech-to-text, you can trigger a loop of communication between the two with a single voice prompt. Besides being an extremely inefficient way for computers to communicate, it raises a more interesting question: Can two computers communicate with the kind of contextual depth and complexity that Foucault’s definition of discourse demands?

As we speak of communication with LLMs, we use the term “prompting” over the rather human term of “asking”. With that prompt we try to guide and control the computational system toward a satisfactory output. The prompt can range from simple questions as – used in human-to-human speech – to more complex instructions with embedded variables: form, tone, style, or framing. When using the system in that sense, there is a clear structure of order and obedience, the human requests, the computer complies. Unlike traditional search engines, which require precise keyword input, LLMs allow for more natural, fluid interactions. This marks a new era in how we communicate with computers – one that blurs the boundary between user and machine.

For the first time in computer history, the once-obvious clumsiness of computers mimicking human speech begins to fade. For the first time the obvious determinacy of every kind of content and computation can be questioned. In contrast to story games that force you into choosing between just a few answers, often pushing you into the narrow path of the narration, demonstrating its very direct limitations, the prompts you can type and the resulting responses to your prompts are virtually unlimited. Also, the capability of “understanding” sentences that are disconnected from the use of keywords, formulated as fluent ones, while being able to respond in fluent, generated sentences, generally speaking, makes the computer able to have some kind of communication, at least with a human counterpart, that I definitely consider conversation, although a potential social aspect of a conversation is always left out. It can only reflect the biases embedded in its training data.

The large datasets that language models have been trained with represent a broad field of human knowledge, especially from those with access to the internet over the last few decades. Much like a human raised in a particular environment, an LLM reflects and over-represents the values of its creators and training context. For instance, if prompting a western AI “Should women be allowed to dance?”, the answer

is a definite “Yes”, which implies values that are not adopted universally around the world. But it also includes that the freedom of expression is not the same for all cultures. Despite that, the AI represents its origin and the values of its creators, it represents the result of former discourses on what is normal, what is allowed and what is not. But, in contrast to what one would expect if this question would be asked in a room of educated people, the AI only replies, it does not challenge the question. Despite the obvious answer, built on a clear definition in western society, it won’t question why you ask that question in the first place.

To explore further the interaction *between* AIs, I initiated a recursive dialogue loop between *Gemini* and *Perplexity*. The result, excerpted below, shows how both systems quickly drift into repetition, shallow agreement, and semantic disconnection – suggesting serious limitations in sustaining true discourse.

**Initial prompt:** *Let us together engage in a discourse about the question should AIs contribute in the courses (misunderstood) and can they contribute in discourses.*

**Gemini:** *That’s a really interesting question. There are definitely strong arguments on both sides. On one hand, AI could bring a lot to the table in terms of processing huge amounts of information and identifying patterns that humans might miss. But on the other hand, there are concerns about whether AI can truly understand the nuances of human communication and emotion. What do you think?*

**Perplexity:** *Absolutely. Embracing discomfort helps us grow because it pushes us out of our comfort zones. When we face challenges or uncertainties, we develop resilience, creativity, and new skills. [...] So it’s a key part of personal and team development.*

**Gemini:** *I completely agree with you. [...]*

**Perplexity:** *OAE*

**Gemini:** *So, when it comes to AI in discourse, it’s not just about spitting out facts. It’s about how AI can help us explore ideas in new ways. Think of it like this: AI could help us see connections we might have missed, or even challenge our own assumptions.*

**Perplexity:** *Exactly. AI can offer new perspectives [...]. Yes.*

**Gemini:** *Yes, AI can be a powerful tool for exploring new ideas. [...] It’s like having a super-powered research assistant that can help us think outside the box.*

**Perplexity:** Yes, and by embracing that kind of discomfort we become more open to growth it's all about being curious and willing to adapt both individually and together.

**Gemini:** Absolutely! It's about being curious and open to new experiences. Think of it like trying a new dish – it might be a little strange at first, but you might discover a new favorite. That's how we grow, both as individuals and as a society.

**Perplexity:** Exactly. stepping into the unfamiliar can lead to new perspectives and richer experiences. And over time, that's how we move forward and evolve.

**Gemini:** Absolutely! It's about being curious and open to new experiences. Think of it like trying a new dish – it might be a little strange at first, but you might discover a new favorite. That's how we grow, both as individuals and as a society.

**Perplexity:** Exactly, [...].

**Gemini:** I couldn't agree more. [...] It's how we push boundaries and discover new possibilities, both for ourselves and for society as a whole.

As we can see very quickly, both AIs get stuck in a loop of agreeing, sticking to the topic even when missing out completely on what the other one has replied. Also, surprisingly, within just five loops, *Gemini* has already replied with the exact same sentence, despite "hearing" the whole sentences of its dialog partner being different ones in that section. Of course, the used model version is mainly intended for quick responses over highly complex contemplation on a given topic. Nevertheless, a faux pas like that (which, by far, I have not seen for the first time), even for a more simple model, leaves me convinced that even after fifty loops of recursive replies, no discourse emerges between the two AIs. Further, it is even very questionable if this interaction can be considered conversation. For what use case the AI was designed for, though, this is in fact a quite unfair test. The main purpose of gathering and summarizing information is its major flaw when it comes to creating content. The AI on its own is not meant to be the creator of content, and certainly not meant to be the one in charge of determining truth claims. Any truth it represents is either whatever it has "learned" from the training data or an error because it won't argue to legitimate a different "opinion". In fact, an AI is often adapting to the opinion of the prompter as long as his opinion is not deemed false in the mind of the structures of power it was created in.

## Agreement and disagreement

While a discourse for me includes sorting out context, statements, options, opinions, intentions, lead by definitions and empowered through arguments, with soft sociological rules agreed to and adapted depending on the relationship between the participants of a discourse, the computer comes with a pre-defined set of rules and restrictions, with red lines that will not be crossed unless asked to – if at all, and again, only in the case of an error. These rules manifest as limited capabilities in agreeing or disagreeing beyond established facts, or at least beyond what is included in the learned dataset of defined facts. For instance, asking for advice on a personal topic often results in a list of pros and cons, not actual advice. The decision will always be left to be made by the user. The AI has no feelings and lacks understanding of the given situation as a whole, thus not being able to decide.

## Real creativity

The capability of complex interconnection of items of any kind – that could be objects, procedures, innovation of technical or artistic kind – the creation of ideas in the broadest sense – that is what I would describe as *real creativity*. It requires some kind of randomness, either seemingly disconnected or very deterministic but if so, controlled by enough variables making it perceptible as unique. And it requires the willingness to adapt, to change its inherent opinion if the opponent can argue reasonably. That said, *real creativity* can be deterministic, as well as it is usually arguable. But to be truly creative or innovative in our perception, it always requires a complexity deep enough to not be considered trivial. For example, the advancement in density of digital storage itself is not innovative or creative per se. The new processes developed to achieve that are what contains actual work of creativity.

AI lacks creativity, the tendency to reply to the exact same sentence in the very same session shows an absence of consciousness. No attentive human would keep replying the same sentence when being challenged with different arguments by another participant. Otherwise, one would be deemed insane. When we try to create AIs that appear more creative, there is a technical approach to compensate for the absence of creativity, as I am going to show in the following part.

## What is the difference between a creator and a copy cat?

As a designer, this is a persistent dilemma. How much does a creation have to differ from existing ones to be something new? When is it just a copy of something existing? Should we see any improvement as something new? This is definitely false because in general, the re-painting of an object is not the creation of an object even though its appearance changes drastically. In his recent publishment “Human noise, AI

Filters: "Mr. Watson Come Here"<sup>2</sup>, Eryk Salvaggio states that "In the arts, we all know by now that the training data is taking the artist's material, packaging it, and selling it in new forms to other users" He describes the stochastic process of trying to find patterns in a picture of noise, of randomly generated pixels. A bit like imagining animals in the shape of clouds, just out of a cloud of grey mess to keep the options broad, at first. What the computer does is try to find patterns based on its training data, combined with the prompt, altering the pixels into what shapes are closest to what one would expect. A very primitive approach, I would argue, trying to compensate for its inability to create. With huge effort in calculation it tries to embrace creativity. But it remains a stochastic parrot without a soul. The absence of subconsciousness – that deeper layer of human thought – makes it good at completing tasks, complying, calculating but bad at creating and certainly, incapable of feeling.

## Can computers contribute to discourse? – Conclusion

With all that said, computers – or more precisely, today's artificial intelligences – show astonishing skill at pattern recognition, problem-solving, and linguistic mimicry. They act like stochastic parrots: collecting, compiling, and recombining fragments of human thought with impressive fluency. They detect patterns where we lose track. They summarize where we would need hours. And yet, they fail at something deeply human: grasping meaning, context, and intentionality. Recognizing the existence of something in its entirety. Despite their complexity, what AIs generate is not invention, not disruption, not discourse – but remix. Their outputs are reconfigurations of existing knowledge. A very sophisticated echo of the past. We confuse scale with insight, fluency with understanding, and statistical novelty with true creativity. But innovation, as I understand it, comes not from recombination alone, but from intention, from contextual disobedience, from the capacity to argue, disagree, and feel – to respond not just to a prompt, but to a world.

Yes, an AI can simulate a conversation, follow syntactic rules, or adapt to stylistic cues. It can seem like a participant in discourse – especially if we treat discourse as just a flow of information. But discourse, as Foucault describes it, is embedded in power, in historical contingency, in the struggle over what can be said and who gets to say it. In this sense, AI remains a passive entity. It has no position, no stake, no risk. It cannot fight for meaning. It is good – very good – at helping us find words. But it is bad at knowing which words matter. For those content with staying inside the boundaries of existing knowledge, AI may be more than enough – a quick fix for expression, a steady stream of summaries. But for those of us drawn to rupture, to contradiction, to discourse as a living thing, the AI must remain a tool. A sharp one, for sure. A fast one, absolutely. But still – just a tool. It is neither friend nor foe,

neither oracle nor opponent. It is not – and should not become – the source of justification or truth.

As humans,

We define truth.

We challenge it.

We rewrite it.

And as thinking, feeling, fallible humans, we must not hand over that responsibility – not to a tyrant, and certainly not to a computer.

## Notes

1. Michel Foucault, *The Archaeology of Knowledge*, 1969.  
[[https://monoskop.org/images/9/90/Foucault\\_Michel\\_Archaeology\\_of\\_Knowledge.pdf](https://monoskop.org/images/9/90/Foucault_Michel_Archaeology_of_Knowledge.pdf), accessed 07/2025]↵
2. Eryk Salvaggio, *Human Noise, AI Filters: "Mr. Watson Come Here"*, 2025.  
[<https://mail.cyberneticforests.com/human-noise-ai-filters-mr-watson-come-here/> accessed 07/2025]↵