

Ubiquitous Dystopia

Digital Worlds and Their Impact on People

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The year is 2025, and the line between the digital and physical realms has nearly disappeared. While phrases like "chronically online" and "doomscrolling" are used humorously, they reveal a deeper truth: our lives are now lived through screens, sensors, and networks that permeate every corner of our daily experience. Digital worlds are no longer just the stuff of video games or virtual reality headsets; they have seeped into the fabric of ordinary life through algorithms, smartphones, Internet of Things (IoT), and a web of invisible systems. Mark Weiser's [1] vision of "ubiquitous computing", a serene, integrated world where technology seamlessly blends into the background, seems realized. However, instead of technology quietly supporting us, we often find that these ever-present systems subtly govern our attention, choices, and sense of identity. While utopian in design, these digital environments frequently operate invisibly and constrain us more than they empower us, guiding us along paths set by code and commerce.

Interactive media does not merely create fictional digital worlds. It has become the scaffolding of modern existence and the infrastructure of modern life. It is a "ubiquitous dystopia": an ever-present system where our agency is constantly negotiated between personal desires, corporate interests, and algorithmic predictions. Instead of giving us more freedom, digital interactivity can submerge us deeper into systems of surveillance, endless feeds, and work disguised as play. This paper argues that by examining ubiquitous computing, cybernetic art, and technological devotion, we can gain insight into how digital worlds shape not only how we play, but also who we are, what we believe, and how we perceive each other. It further explores how artists reenact, challenge, or mystify these hidden systems through various forms of expression. When interactivity is everywhere, built into every device and every algorithm, do we still have any real say in who we become? Or are we simply living inside a digital system that shapes us more than we shape it? Are we disciples of an omnipresent digital deity?

Early Visions of Digital Worlds

Long before digital life became the air we breathe, a few visionaries foresaw that computation might do more than crunch numbers. They saw it as something capable of reaching into the

core of how we think, perceive, and even become ourselves. For them, technology was not merely a tool but a force reshaping the architecture of the mind.

In 1945, Vannevar Bush [2] envisioned the "Memex," a vast, tangled archive for storing and retrieving knowledge in ways that mirrored human memory. His idea suggested that technology could not just automate or imitate but amplify our ability to connect ideas: a partnership between human thought and machine logic. As we follow these early visions, first imitation, then reproduction, automation, and finally augmentation, we begin to see something new: technology evolving from an instrument to an extension, from a servant to a collaborator. Soon after, Alan Turing [3] reframed intelligence as imitation, suggesting that the boundary between human and machine was more porous than we might like to think. His "Imitation Game" foreshadowed the strange feedback loops of today's digital spaces, where people and algorithms mirror one another and the edges of identity begin to blur.

Walter Benjamin [4], writing even earlier, observed that when art could be copied endlessly, something essential was lost even as access expanded. That anxiety about authenticity now resonates in digital culture, where information flows effortlessly and origins can easily be obscured. Decades later, Joseph Weizenbaum [5], creator of ELIZA, one of the first programs to mimic conversation, warned against confusing calculation with understanding. Machines can process data, he argued, but cannot feel or judge as humans do.

Taken together, these glimpses remind us that our digital world did not appear out of nowhere. It is the culmination of a long, unfinished dialogue about how technology shapes thought, empathy, and trust; an ongoing argument about what it means to be human in a world remade by our own inventions.

Ubiquitous Computing: From Calm Technology to Digital Infrastructure

In 1991, Mark Weiser [1] proposed the idea of "calm technology". He envisioned a future in which computation would fade into the background, quietly supporting human life. The most potent technologies, he suggested, would be those that remain invisible to our awareness. Such technology would allow us to focus, create, and be more fully ourselves. But as digital networks have

spread into every corner of daily life, Weiser's vision has been realized in an unexpected way. The same calmness that once promised to serve us now masks a new kind of machinery. Devices and algorithms quietly shape our attention, our labor, and even our desires.

Political theorist Langdon Winner [6] was skeptical of the idea that more information would automatically lead to democracy or empowerment. He pointed out that access alone does little if it is not accompanied by genuine agency. Again and again, the very infrastructures that claim to foster participation end up reinforcing the same hierarchies they were supposed to dissolve. In capitalist democracies, corporate interests and technological innovation are deeply intertwined. This contradiction becomes the norm. The tools that were meant to connect us instead channel power upward. Platforms harvest data, predict behavior, and manipulate choice. All this occurs under the guise of personalization. What appears as neutral technological progress is, in fact, the architecture of corporate power.

Jean-Christophe Plantin and Aswin Punathambekar [7] describe how digital platforms, initially praised for being open and decentralized, have evolved into control infrastructures. The original promise of diverse voices has given way to the dominance of a few monopolies that subtly mediate communication, commerce, and even emotional life. Daniel Neyland [8] and Garnham & Smith [9] deepen this critique by explaining that algorithms do more than manage digital content; they encode corporate and cultural values into daily routines. These algorithms decide what people see, buy, and believe, turning invisible computation into a powerful means of social and economic governance. Algorithms are not neutral tools; they embed corporate values and shape perceptions and behaviors, making invisible computation a pervasive force that governs society and the economy.

Seen in this light, Weiser's "calm" world has indeed arrived, but inverted. Machine intelligence now fulfills Alan Turing's vision of human-machine imitation, though quietly and pervasively. Humans perform for algorithms. Their gestures and choices are analyzed as data in an endless feedback loop. We inhabit Weiser's dream world turned inside out: a calm dystopia. Here, invisible computation, sustained by capitalist incentive, manages relationships, labor, and perception. All the while, it preserves the illusion of freedom.

Interactive Media as Ubiquitous Dystopia

Gilles Deleuze [10] once suggested that power no longer operates by locking people up in rigid institutions, but instead permeates us in subtle, continuous ways. It's hard not to see the echo of that idea in today's digital world, where our actions are tracked, nudged, and shaped by feedback loops we barely notice. Deleuze and Guattari's [11] concept of the "rhizome" offers another metaphor: networks that appear open and free on the surface but are subtly shaped by hidden rules. Digital platforms promise us connection and freedom, but behind the scenes, they are carefully structured by surveillance, code, and the drive to make money.

Building on these concerns about digital power, Jaron Lanier [12] has pushed back against the idea that the web is genuinely open, warning that the collective nature of Web 2.0 can flatten out individuality and turn us into data points. He calls for a more human approach to technology, reminding us that interactivity often means reducing people to numbers that can be measured and predicted. Shoshana Zuboff [13] takes this further, showing how our everyday actions online, every click and every pause, are turned into raw material for profit. In this system, taking part becomes unpaid work.

Extending these arguments, Daniel Neyland [8] reminds us that people don't just accept these systems passively; they find ways to adapt, push back, or go along with the rules set by algorithms in their daily lives. The promise of interactivity: choice, agency, and engagement often hides the fact that our options are already shaped by someone else's design. What appears to be participation is often a set of choices predetermined by companies. The menus, algorithms, and recommendations we encounter every day subtly set the boundaries for what we can do, transforming digital life into a kind of game with invisible rules.

Taken together, these dynamics highlight how our sense of self is shaped by what algorithms suggest to us, our actions are turned into games with likes and streaks, and even our attention is pulled by notifications we barely notice. Yet we are rarely taught how to deal with this kind of constant mediation. We now live in a world where control is woven into the very interfaces we use, and where simply participating means being governed in new, subtle ways.

How Artists Make the Digital World Visible

If the digital world now functions as an invisible system of control, shaping our lives through systems we rarely notice, artists can respond by making that system visible. They can transform interactivity from participation into reflection, revealing how technology mediates perception and power. Roy Ascott [14] frames art as a cybernetic process, an evolving network of feedback between artist, viewer, and machine. His model positions the artwork as a living system rather than a static object, emphasizing transformation and participation over permanence.

This tension also appears in art history. Walter Benjamin [4] and Hito Steyerl [15] extend this discussion through their analyses of aura and circulation. Benjamin worried that art would lose its aura through mechanical reproduction and then be stripped of its ritual presence. Steyerl revisits this idea in the context of the networked age. In her essay *In Defense of the Poor Image*, she describes the low-resolution, endlessly shared digital file as both degraded and liberated: a "poor image" that resists elitist hierarchies by circulating freely. Yet this democratization also comes with loss: value, context, and attention are all fragmented. Steyerl's work exposes how digital images oscillate between empowerment and decay, as well as between visibility and disappearance.

In this context, interactive installations, VR environments, and digital relics appear reproducible yet often feel singular and immersive. This restoration carries dystopian undertones: what

feels like freedom may, in truth, be a pre-programmed illusion of agency. But they also simulate authenticity, a temporary return of aura within an otherwise flattened digital culture. This reinforces what I am trying to convey in this section: that artists' work is crucial in exposing how digital systems shape what we see, value, and trust today. While these systems can make us feel powerless and jaded, we can reclaim some control over our lives. Cynicism is often mistaken for insight, and optimism is often confused with naïveté. Romanticizing the future, the advancement of technology, and the internet in a positive, new way could manifest a future world that we will be happy with. The perspective and expression we put out into the world carry significant weight.

Revealing, Ritualizing, and Worldbuilding



Figure 1: Shyber1



Figure 2: Just Passing Through

My personal artwork explores post-digital themes like technological spirituality, isolation, and the loss of self in our hyperconnected world. We are not just *Homo sapiens* but also *cyborgs* [16]: hybrid organisms where human biology, digital data, and circuitry coexist. My goal is to uncover the underlying factors that contribute to this condition and to foster thoughtful consideration of it. Technology has become sacred to us, with screen interactions resembling a modern ritual.

I blend analog and digital materials, utilizing collage, painting, animation, digital illustration, and graphic design to connect the physical and digital realms. My works feature guardians, avatars, and thresholds, forming nonlinear stories that mirror the logic of networked systems.

When we transform digital systems into catalysts for authenticity and introspection through art and storytelling, dystopia can begin to resemble mythology: the dark aspects of technology become compelling tales for reflection. Viewers enter a realm of belief, engaging with symbolic narratives that reveal hidden facets of our digital world. Interactive art may not fully escape the systems it questions, but it exposes these frameworks and makes them meaningful. In this way, technology becomes a space for reflection and the exploration of human meaning. Just as we remember the ancient Egyptians through their art and architecture, if all this falls to the ground one day, it is not the devices or code that will persist. It is the art, illuminating our feelings, beliefs, and humanity, that will endure, serving as a testament left for future generations to discover and understand who we truly were.

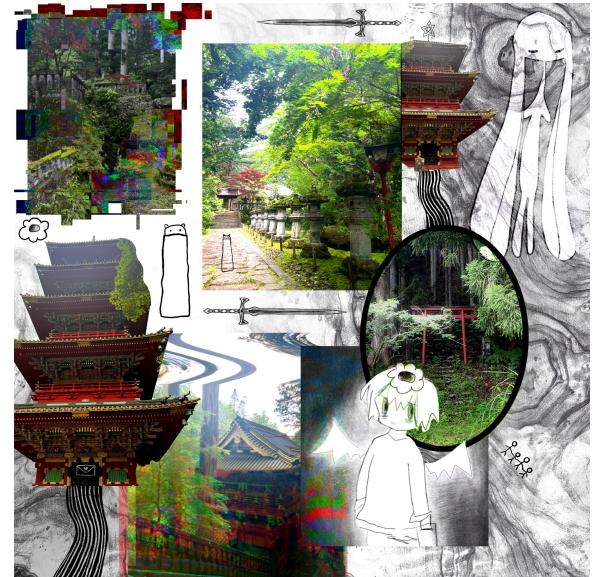


Figure 3: Shrines



Figure 4: Chronically Online

We now live inside digital worlds that frame our daily existence. We live inside digital worlds that shape our everyday lives. While transformative systems were envisioned by early philosophers, the reality is more ambiguous. Instead of peace and clarity, we live in opaque digital systems that subtly shape our views and decisions. The promise of technological freedom often arrives with subtle forms of control, shaping how we see, act, and understand ourselves. Yet through art and reflection, we can make the invisible visible, transforming awareness itself into a kind of ritual. I hope for a gentle re-enchantment: a way of seeing the digital world not only as a system of control, but as something capable of meaning and connection. Artists, including myself, offer responses through various media that expose or reframe the hidden architectures of the world. Through both interactive pieces and speculative visual art, we can begin to understand how we navigate, mythologize, and resist our digital condition. The future of interactive media may not lie in building new worlds to escape into, but in creating spaces where we can *feel* the ones we already inhabit, spaces where technology becomes something we can sense, question, and even reimagine.

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