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The Library of the Incalculable

by Payal Arora

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Introduction

Naming the Incalculable

The title *The Library of the Incalculable* was born from conversations with the director and cofounder of V2_Lab for the Unstable Media Joke Brouwer, speaking of people, lives and things that are deemed incalculable,¹ not because they are beyond comprehension, but because they may be of little interest or value to our algorithmic and extractive systems. These are the existences that escape Big Tech's gaze: unprofiled, unmonetized, ungoverned by the logic of prediction. To be incalculable, in this sense, is to fall outside the grammar of the global economy, and to remain unreadable to those who measure worth in data points and metrics.

And yet, it is precisely within this space of neglect that a new politics of life might be imagined. The incalculable is not an absence but a potential, a different way of sensing the world, one that values relationality over extraction, care over computation, and the commons over the countable. *The Library of the Incalculable* grows from this idea. It imagines an archive for everything that escapes capture or refuses to be digitized: gestures of care and compassion, humor and satire as resistance; feelings of camaraderie and belonging; the moral imagination of the marginalized.²

This book is about building the worlds missing around emerging technologies – artificial intelligence, drones, synthetic media, robotics, biometric systems. No technology arrives alone. Each inherits older ways of seeing, remembering, governing, caring and imagining. AI is the latest chapter in a much longer human story of tools and techniques, from oral traditions to writing, from weaving to coding, from maps to machine learning. Rather than treating these technologies as unprecedented ruptures, *The Library of the Incalculable* situates them within the everyday practices

through which people have always made meaning, negotiated power and imagined different futures. The future of AI is therefore inseparable from the histories it carries and the lives it encounters.

Every AI artifact has a before and after. Before the prompt, the image, the recommendation, the prediction, there is a life already in motion: a desire, a fear, a memory, an aspiration, a necessity. People do not arrive at technology as blank slates. They bring histories, relationships, inequalities and dreams. They arrive with cultures that cannot be reduced to datasets and intentions that cannot be fully inferred from clicks. After the interaction comes another life: one shaped by consequences – new opportunities, fresh exclusions, unexpected solidarities, digital violence, creative possibility. AI does not begin or end at the interface.³ It stretches across lives before it and lingers long after it.

This book lives in these thresholds. It moves behind the screen to the invisible labor that makes intelligence appear effortless: the data annotators in the Philippines training models one image at a time; the content moderators absorbing humanity's darkest actions; the children and informal workers across Ghana, Nigeria and beyond dismantling discarded batteries, cables and chips so that the next generation of devices can be built.⁴ It follows the material lives of minerals, wires, energy and waste alongside the immaterial worlds of code, imagination, memory and emotion. It asks us to see both the visible interface and the invisible infrastructures that sustain it.

The Library of the Incalculable dwells within these apparent binaries: before and after, front end and back end, material and immaterial, human and machine, extraction and empowerment, prediction and possibility. Yet it refuses to leave them as opposites; instead, it lingers in the spaces between them, where people improvise, negotiate, resist and imagine otherwise. It is in these in-between worlds that the incalculable resides, not outside technology, but within the lives that exceed what technology can ever hope to measure. This book proposes a poetics of the algorithmic, an attempt to catalogue the unquantifiable – not by

disciplining it, but by listening to its multiplicity. It is about sidelining the algorithm, recognizing the limits of data capture, and instilling hope in humanity.

It is worth acknowledging here that hope has become an unfashionable word. We live in a time where collapse is easier to imagine than repair, where skepticism is celebrated and hope must be defended. We are taught that intelligence lies in critique, that to see clearly is to anticipate destruction. But pessimism is a privilege for those who can afford to despair.⁵ Billions of people do not have the luxury of disengagement. One cannot opt out of a welfare system governed by algorithms, refuse the digital marketplace that feeds a family, or abandon the networks through which care, work and belonging now circulate. Hope, then, is not the opposite of realism. It is its companion. To be optimistic is a moral practice, cultivating ordinary acts through which people refuse to let the future be foreclosed.

In my two decades of research in the Global South, I have encountered this hope, not as sentiment but as method. It appears in communities that fill the data gaps left by absent states, mapping themselves when no one else will.⁶ It lives in those who play with the rules of platforms, who borrow, remix and repurpose technologies for ends never imagined by their designers. It slips between the digital and the analog, knowing when to log on and when to disappear, when to be visible and when to remain opaque. This is not optimism born of abundance, but of necessity. It is patient, improvisational and quietly radical.

The Library of the Incalculable is written from this disposition. I do not deny extraction, violence or inequality. Nor do I conflate critique with constructive approaches. Instead, through these alphabetically organized chapters, I have invited authors who are artists, activists, scholars, journalists, and philanthropists from around the world to share with us how they continue to build despite uncertainty, to create despite constraint, and to insist that another technological future remains possible. If algorithms promise prediction, people will continue to surprise them. It is in this

surplus of human imagination that hope persists, not as certainty, but as the incalculable itself.

I am inspired by Roland Barthes's *A Lover's Discourse*⁷ – a structure that pretends to impose order even as it celebrates fragmentation. Each letter gathers a constellation of concepts rather than a single definition, bringing an alphabet to life through words, stories, images and reflections. These are not meant to be exhaustive or authoritative. They are invitations rather than conclusions, teasers rather than taxonomies, encouraging readers to continue building on this library long after its final page.

Each chapter opens with a vignette that foregrounds lives, places and practices too often underrepresented or mischaracterized, and draws inspiration from those who have long expressed the incalculable from the margins. From there, the chapter unfolds through voices from the field, and culminates in essays, visual storytelling, artistic interventions and reflections by scholars, artists, activists, journalists and practitioners. Together, these contributors open windows onto different worlds and invite us on a co-curated journey across those worlds.

Like the lives we seek to honor, in these alphabets the authors refuse closure. Their contributions move through improvisation and ingenuity, where intelligence is not mechanical but collective, not statistical but lived. Rather than offering a definitive vocabulary for AI, this book assembles a living lexicon of possibilities, one that remains unfinished, plural and open to those who wish to add their own words to *The Library of the Incalculable*. This library is not housed in marble halls, but in the rhythms of daily life. It is assembled from WhatsApp chats and street art, from small solidarities and large silences. Our authors provide pathways that resist the totalizing impulse of datafication – the desire to render all things visible, searchable and profitable. Instead, they honor opacity as an ethics, and unknowability as a right.

What follows are two pathways through this idea: the art and the science of the incalculable. The first explores how people create meaning and beauty within systems that do not count

them. The second examines how we might reimagine technology and knowledge production to accommodate the uncounted. Together, they sketch a bridge between the technical and the human, between what can be computed and what must be cared for.

The Art of the Incalculable

The Library of the Incalculable is not a record of what we know, it is an ode to what escapes capture. For decades, my work has taken me to slums and start-ups, policy rooms and street corners, tracing the poetics of digital life among the “next billion users.”⁸ These users are young people, largely from the Global South, who have come online in the past decade and entered the digital world not as compliant users, but as playful authors of possibility.

They encounter technology less as a system to be optimized and more as a material to be experimented with, bending platforms to their needs, remixing content, and inventing vernacular uses that escape formal design. Their creativity unfolds in low-bandwidth conditions, through improvisation and social exchange, revealing forms of value that resist measurement. Their expressions become a living archive of gestures, hacks, jokes, desires and solidarities that algorithms struggle to recognize. What they produce is often legible through metrics of growth or efficiency, yet it is here that digital culture feels most alive, messy, excessive, emotional and irreducibly human. I have learned through my engagements with these young people that the future of intelligence does not rest in precision but in play, in care, and in the unquantifiable ways people continue to build meaning within systems that often refuse to see them, or see them only as subjects of prediction, extraction and surveillance.

To create is to measure against infinity. Yet the most enduring forms of creativity are those that escape measure altogether. Across the Global South, AI is becoming another material for

improvisation. A young entrepreneur in Kabul relies on generative AI to draft marketing copy for a home-based business she is forbidden to operate publicly.⁹ A collective of Latin American cultural innovators experiments with AI to preserve Indigenous storytelling while reaching global audiences.¹⁰ In South Africa, educators explore AI to recognize informal knowledge that conventional modes of credentialing has long ignored.¹¹

These are not simply applications of AI – they are acts of translation, adaptation and hope. These are not stories of deficiency, but of ingenuity in the art of making do in worlds that do not count you in. AI, with its hunger for quantification, often misses the meaning of this human art. AI translates imagination into data points, culture into tokens, emotion into sentiment scores. But the incalculable resists being turned into code. There is uncaptured value that resides in the tremor of a voice, the silence of refusal, the unpredictability of care.

To archive such moments is an ethical act,¹² recognizing that data can never account for the fullness of life. *The Library of the Incalculable* celebrates the aesthetics of incompleteness, the space between what is said and what is sensed. It is a visual-textual book precisely because we want to capture what cannot be summarized only in words: the gestures, the sounds, the textures of the unquantified. This book is a cartography of the immeasurable. Each word, each theme, each image invites us to dwell in contradiction: between design and desire, between automation and artistry. Along with a family of contributors, thinkers and doers, using ethnographic fragments, visual essays and dialogues close to my heart as an anthropologist, we seek to remind readers that AI does not imitate intelligence, it imitates measurement. What it misses is precisely what makes us human: our noise, our nuance, our capacity for wonder.

This is not to romanticize resilience or suggest that agency overtakes structure. For millions living under authoritarian regimes, pervasive surveillance and internet shutdowns, biometric identification and data extraction are not matters of choice but

conditions of everyday life.¹³ Digital participation is often compulsory, visibility unevenly distributed, and refusal costly. The architecture of power is real, and its consequences are material. Yet agency has never required perfect freedom to exist. It emerges in negotiation, in ambiguity, in the countless decisions people make about what to reveal, what to conceal, what to remix, what to refuse, and what to imagine otherwise.

This book chooses to remain with these tensions rather than resolve them. It resists easy binary oppositions between oppression and liberation, optimism and pessimism, empowerment and control. These are not contradictions to be harmonized, but conditions to be understood.¹⁴ To stay with the tension is to recognize that voice can persist within silencing regimes, that vision can endure despite systems of invisibility, and that humanity continually exceeds even the most ambitious architectures of calculation. The incalculable is not found beyond power, but within the lives that refuse to be fully determined by power. It is here, in this unfinished space between structure and possibility, that this library makes its home. This is the art of the incalculable: finding beauty in the uneven and meaning in the unmeasurable.

The Science of the Incalculable

To speak of a "science" of the incalculable may sound paradoxical. But it is precisely in the paradox that new forms of knowing emerge. The Global South has long practiced sciences of survival, ways of learning that blend intuition, observation and collective intelligence. These sciences are not reducible to Western empiricism, yet they are rigorous in their own right. Such science begins from the recognition that dominant knowledge systems have historically rendered vast domains of life unintelligible by translating them into what Boaventura de Sousa Santos calls the "epistemologies of the North," frameworks that privilege abstraction, measurement and universalization while systematically

performing "epistemicide" through the destruction or delegitimizing of other ways of knowing.¹⁵

This book works towards the validation of knowledge grounded in struggle, locality, embodiment and relationality. A science of the incalculable builds on this claim by refusing the assumption that what cannot be quantified is therefore absent or irrelevant. Instead, it treats opacity, partiality and situatedness as epistemic resources, foregrounding forms of knowing that emerge from lived entanglements with inequality, care, survival and refusal, rather than from detached observation. Here, we reimagine knowledge and world-making as radically interdependent, plural and co-constituted, rather than governed by a single modern ontology.¹⁶

Incalculable is not a residual category, but the very condition of an inclusive life: the excess of meaning, relation and value that cannot be reduced without violence. The fact is, knowledge is inseparable from sovereignty and survival.¹⁷ A science of the incalculable therefore does not simply "include" marginalized ways of knowing in existing worldviews; it reworks the very conditions of intelligibility, shifting from extraction to reciprocity, from classification to relation, and from mastery to situated responsibility.

If the history of technology has taught us anything, it is that knowledge systems reflect the values of those who build them.¹⁸ When the technocrats define intelligence as prediction,¹⁹ the relational, the emotional and the social, the very qualities that make humans irreplaceable, are sidelined. In contrast, a science of the incalculable would begin with the assumption that value cannot always be optimized. It would design technologies not to dominate complexity but to work with it. As a board member for several governments and international organizations, I have learnt how urgently we need to rethink what counts as "responsible" when seeking to make AI work justly for society. While bias audits and fairness scores can serve as correctives to past injustice, they risk reducing justice to something that can be measured, benchmarked and optimized.

In this book we strive for a different orientation: we ask whose stories are told through data, who gets to imagine alternatives, and how data practices might enable dignity, expression and collective futures, rather than staying with narratives of extraction and control. Using the CARE principles – Collective benefit, Authority to control, Responsibility and Ethics – we recenter data governance on relationships rather than metrics, insisting that technological innovation be accountable to the communities it affects.²⁰ Together, these approaches invite a shift from counting inclusion to caring for it, from technical fixes to ethical imagination.

The science of the incalculable is not anti-data. It does not reject measurement or modeling, nor does it romanticize a world without computation. It is acutely aware of data's limits as well as its liberating forces, skeptical of its claims to neutrality, and attentive to its mobilizing forces. We must sit with this duality of data itself. Data has opened possibilities for recognition where there was previously only absence. People and groups long unaccounted for – migrants without formal identities, communities excluded from administrative grids, geographies once marked as blank or "unknown" on platforms like Google Maps, can, through data infrastructures, become legible to states, services, and systems of care. In such moments, data does not merely count; it confers existence within regimes that govern access to rights, mobility and resources.²¹ On the other hand, this same expansion of legibility demands a sharper vigilance toward what remains uncoded, miscounted, or rendered invisible by design. What appears as inclusion can simultaneously be a narrowing of reality into forms that can be captured, compared and optimized.

In contemporary debates around AI, this tension is everywhere. We see it play out in the repeated urge to "fix" bias by expanding datasets, an approach that often reproduces the very logics it seeks to repair. Inclusion becomes a matter of adding more data, more bodies, more traces, rather than pausing to ask harder

questions about power, consent and voice. For many marginalized communities, being included on these terms' means being rendered legible without agency, counted without being heard. A science of the incalculable pushes toward new tools, frameworks and modes of collaboration that allow communities to shape how they are represented, or to choose opacity, refusal and repurpose their forms of participation.

This is where the true work lies. The thin line between inclusion and exclusion, between the democratization and the demonization of AI, is not drawn by technology itself but by the institutions that surround it: the laws we enact, the practices we normalize, and the values we are willing to defend. The science of the incalculable reminds us that this labor remains deeply human. AI can be an ally, but only when it is embedded within systems of care that respect the process of fair and humane data capture.

A science of the incalculable recognizes that more data does not necessarily mean better knowledge. It asks what is lost when emotions are reduced to sentiment scores, when care work is translated into productivity metrics, or when cultural expression is flattened into training data. In my research across the Global South, intelligence often emerges not through prediction but through attunement, knowing when to act, when to wait, when to adapt. Through this work, we ask the reader to rethink ways to bridge the technical and the human. This might mean designing AI systems that incorporate community deliberation alongside automated decision-making, or governance models that value consent and care over scale and speed.

In the pages that follow, we propose alphabets of the incalculable: a series of keywords, notions and images that reveal how the immeasurable continues to shape our algorithmic age. Each letter in this book is anchored in inspiration, opening not with a definition, but with an invitation. The voices gathered in this book span continents and disciplines, bringing together contributors from across the Global South and North. Each write from a distinct place, profession and lived experience, reminding

us that no single institution or expertise can or should claim authority over the future of AI.

Together, they form a living archive of perspectives that is deliberately plural, situated and unfinished. As curator of these entries, I draw from the collaborations that have shaped the Inclusive AI Lab, an initiative I founded to help build more inclusive and sustainable AI data, tools, services and platforms, with a particular focus on the Global South. Through this work, I have had the privilege of collaborating with all the contributors to this book who are reimagining what AI can become.

Their contributions invite us into worlds too often overlooked, revealing how fairness can be visualized, how opacity can be designed for, and how the messy middle can be where algorithms meet lived experience and where the most meaningful innovation resides. Together, they remind us that humanity's most enduring archive is not stored in servers but carried through stories, relationships and the collective imagination of those who continue to create beyond measure.

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A B C D E F

**Access, Algorithms, Aspiration, Aesthetics,
Artificial Intelligence, Appropriation,
Attribution, Artifact, Adaptation,
Accountability**

G H I J K L M
N O P Q R S T

U V W X Y Z

To speak of access is to speak of possibility. Every technology arrives carrying a promise: to connect, to democratize, to accelerate. Yet every promise also redraws the boundaries of exclusion. Access is never merely about infrastructure or connectivity. It is about who gets to participate, who gets to create, who gets recognized, and who remains invisible. Algorithms increasingly mediate these questions, shaping not only what we encounter but what we come to desire, aspire toward, and believe is possible. As artificial intelligence folds itself into everyday life, access becomes a cultural condition as much as a technical one. It produces new forms of creativity while unsettling old ideas of authorship, originality and value. It invites participation while generating new anxieties around aesthetics, visibility, replacement and belonging. "A" therefore begins with a simple proposition: the future of AI will not be determined by access alone, but by the ethics through which access is imagined, distributed and lived.

Accelerating Access

Artificial intelligence has dramatically lowered the barriers to creation.¹ A teenager in Lagos can produce cinematic videos from a phone. A craftswoman in Rajasthan can reach international buyers through AI-assisted translations. A farmer in Brazil can diagnose crop disease through a chatbot. These developments matter because they redistribute access to knowledge and creative production in ways once reserved for institutions and experts.

Yet AI does more than expand opportunity; it also engineers aspiration. Recommendation engines, creator platforms and generative tools quietly shape what success should look like, which aesthetics deserve amplification, and whose stories become visible. They accelerate not only content but desire itself. Increasingly, our ambitions are co-produced by algorithms that optimize engagement, which may facilitate or hinder human flourishing.

Across the world, however, aspiration has rarely followed Silicon Valley's script. People appropriate technologies for purposes far removed from their intended design: transforming messaging apps into classrooms, livestreams into livelihoods, and gaming platforms into spaces of political organizing and mutual care.² Here, acceleration is valuable not

because it produces more, but because it allows people to imagine futures previously denied to them. Access becomes meaningful only when it expands the horizons of possibility rather than merely increasing participation in existing systems.

To speak of access is thus to speak of both aspiration and exclusion. Every door that technology opens also reveals another that remains closed. The algorithm promises fairness while quietly reproducing discrimination. Appropriation transforms culture into commodity, and adaptation helps people reclaim digital public space. Across the Global South, resource-constrained users continually reconfigure platforms for intimacy, livelihood, learning and invention, remixing scarcity into sources for mobility. Here, access is not simply connectivity or bandwidth. It is about belonging, visibility and the right to participate in shaping digital futures.

But access is also emotional. To create today is to create in public, under the constant gaze of algorithms that reward visibility while demanding endless performance. What emerges is an "anxious aesthetics,"³ creators learning to choreograph themselves for machine attention, experimenting with formats, rhythms and personas that keep them legible to recommendation systems without losing themselves entirely. Anxiety becomes not a personal failing but a structural condition of platform life, a creative language through which people negotiate uncertainty, precarity and aspiration.

Algorithms of Aspiration

"Algorithms of aspiration"⁴ begin with a simple observation: people living within deep and persistent socio-economic constraints do not encounter algorithmic systems merely to optimize efficiency. They come to them in pursuit of hope. The algorithm mediates dreams of becoming, of finding work, gaining visibility, learning new skills, crossing borders, accessing welfare, building a business, or simply being recognized by the state and the market. The algorithm does not merely rank, predict, or govern. It becomes an infrastructure for imagining a different life.

To see algorithms mainly as instruments of surveillance, control or bias is to miss an equally important story. Across the world, people learn to live with algorithms, adapting to their rhythms and logic. They curate profiles, time applications, polish digital identities, clean data trails, game

metrics, and decipher platform rules. These are not acts of naïve compliance but are often forms of aspirational labor,⁵ everyday efforts to align one's creative drive with what algorithmic systems are designed to reward. Algorithms of aspiration reveal how inequality is certainly reproduced through digital systems, but also how it is continually negotiated, stretched and at times quietly contested through ordinary acts of ingenuity.

Nowhere is this more visible than in the realm of aesthetics. Aesthetics is not an abstract principle but can be a tool for mobility. The "Instagram aesthetic," with its minimalist compositions, soft palettes and carefully curated whiteness, has become an aspirational language for creators in rural towns and peri-urban neighborhoods from India to Indonesia.⁶ Many creatives I interviewed in these contexts described Instagram having a "foreign vibe," a visual grammar associated with cosmopolitanism and opportunity. Through these aesthetic choices, marginalized creators imagine themselves not at the edge of the digital world but as participants within it. Social media becomes their neighborhood, the place where identities are rehearsed, solidarities formed, and futures performed into being. Creativity flourishes in digital work and play, in informal learning, in humor, in hustle, and in the persistent desire to be seen on one's own terms.

This economy of aspiration has long powered the digital growth of the Global South. For decades, entrepreneurs have built businesses in environments defined by informality, precarity, weak infrastructure and fierce competition. With few institutional protections and limited disposable income among users, success has depended not on scale alone but on the ability to create meaningful value. Platforms thrive not simply because they are technologically sophisticated, but because they tap into people's enduring enthusiasm for change and their willingness to experiment with new ways of living, working and belonging. Aspiration, more than optimization, has always been the engine of digital innovation.

Attribution Amplified

Attribution has become the new code of ethics among creators.⁷ At a time when generative AI can reproduce styles in seconds and creative works circulate globally without context, the question is no longer simply

who owns an idea, but who deserves recognition. Courts continue to debate copyright, artists protest that AI models trained on their work without consent, and publishers wrestle with licensing agreements. Yet among everyday creators, another ethic has quietly taken hold: give credit where credit is due.

For emerging creators, attribution is not merely a legal obligation but a social contract. Inspiration is expected; imitation is inevitable. What matters is acknowledging those who came before. A tag, a mention, or a link is an act of respect that situates creativity within a community rather than presenting it as the achievement of a solitary genius. To be copied is often seen not as an insult but as a compliment. As one creator from India reflected, "I feel good that someone is copying. I feel that I must have at least done something good to warrant that."⁸ It is not borrowing that is considered inexcusable, but erasure.

This ethic is felt most acutely among rural and semi-urban creators who have long watched their ideas, crafts, songs and cultural expressions travel upward into mainstream industries without acknowledgment or remuneration.⁹ They know what it means to have creativity extracted while remaining invisible. It is why they advocate for practical protections – watermarks, traceable provenance, fair remuneration systems and stronger attribution tools – not to prevent creativity from circulating, but to ensure that recognition circulates with it.

Yet attribution is also an act of confidence. It assumes that creativity is abundant rather than scarce, that influence need not diminish originality. One rural influencer expressed this generosity with quiet defiance:¹⁰

Today they [other content creators] might copy and take one or two creations of mine, [but] finally they will have to do something on their own. How long can they be dependent on me? If they take one or two palms full of water from an ocean, what difference will it make?

As AI increasingly learns from humanity's collective archive, this lesson becomes ever more urgent. The future of creativity will depend not only on better copyright laws or technical watermarking systems, but on cultivating an ethic of recognition. Attribution reminds us that creativity has always been relational. Every work carries traces of others before it. The challenge is not to stop ideas from travelling, but to ensure that the

journeys they take leave behind dignity, visibility, and respect for those whose imagination made them possible.

Anxious Aesthetics

by Lucie Chateau

A distracted boyfriend, a cartoon dog surrounded by flames saying "This is fine," a green frog called Pepe – these images should all be familiar to any internet user who has spent time online in the last two decades. These are memes that have gone viral. They are units of digital culture that have gathered influence as they spread all over the world, thanks to the internet. Memes are participatory. Users simultaneously consume, modify and produce images all over the world. As a result, memes have effectively become one of the most influential visual languages of our time, shaping how people express identity, humor, and even politics. However, participation comes at a cost. Now, corporations, institutions and governments of the world use memes to fight their own online battles from their social media accounts, such as Iran's mocking memes of the US in the midst of their own geopolitical debacle.

I argue that memes have developed into an "anxious aesthetic" – a visual form caught between the rebellious creativity of internet users and the economic systems that turn that creativity into data, attention and profit. From the early days of meme culture, defined by the antagonistic use of irony known as "trolling," up to the current moment of low-quality internet content commonly referred to as "brainrot," meme aesthetics have decisively shaped online culture and visual culture. Seeing, liking and sharing memes have changed what it means to participate in creating and circulating images online.

Every remix, edit or repost adds something new, leaving a visible trace of how people collectively create and share meaning. In this process, the boundary between audience and creator becomes increasingly blurred. Memes can therefore reflect both the creative possibilities of the internet and the risks that come with it. Rather than simply reflecting digital culture, memes have become a distinct aesthetic form that has grown out of the ways we communicate and create online. I use the term "anxious aesthetics" to describe digital forms such as memes that blur the boundary between producing and consuming images. They express

an anxiety about what it means to participate online: are users empowered creators, or are they producing value for the platforms they use?

Memes have an immense countercultural potential, but they must also be situated within the reality of the digital landscape, composed of private platforms and populated by corporate actors. As a result, memes are often co-opted by those seeking to monetize them and profit from the public creativity of internet users. Brands such as Duolingo, Netflix and McDonalds consistently use internet memes in their marketing efforts to appeal to a younger fanbase, though they have proven unpopular with young digitally native people.¹¹

Alternatively, meme factories in Southeast Asia, for instance in Indonesia, can be considered cyber armies that manufacture support for political parties or ideologies. by posting memes on social media, often in countries that are far removed from their own national context, for example, on Facebook groups for Australian political candidates.¹² This loose group of recruited posters are paid for by advertising firms, political parties, or are simply opportunists looking for a creator pay-out by platforms themselves. Indeed, Meta's business model incentivizes creators to post content on their platform, and has spurred a parallel, profit-driven economy in places like Southeast Asia.

Anxious Memes in the Digital Economy

From their ubiquitous presence in our lives, memetic images embody the digital cultural economy. They also embody the contradictions of this economy. It is the clash between public and private interests, between intentions of sabotage and satire that creates these messy, unstable and anxious texts. Anxious memes are conscious of their own compromise and instability. In fact, this anxiety is what makes them productive. Because they engage with their own vulnerability as objects that can be co-opted and weaponized, they stay uniquely transformative and powerful. Take the infamous case of Pepe the Frog, the cartoon frog that became the symbol of Donald Trump's meme-fueled 2016 presidential campaign. The frog, originally a creation of cartoonist Matt Furie, was appropriated by the alt-right during a particularly incendiary campaign powered by irony and trolling. Pepe became the face of the hate-fueled campaign, and was treated as a hate symbol by many, to the dismay of its creator. Years later, in the 2019–20 Hong Kong protests for democracy,

Pepe was re-embraced by the protesters as a symbol of peace and love. Transported into a new setting, the frog was born anew as a figure of solidarity.

Pepe demonstrates the incalculability at the heart of anxious aesthetics. These memes embody something that has too often been compromised by digital platforms' imperative to be calculable: the ability to represent ourselves politically by other means than the ones that have been made available to us. This is why I turn to memes' visual function. The networked image, the image that is constantly in motion, being transmitted and reproduced, represents a cultural, technological and socio-political shift in the way we engage with and participate in aesthetics, but also in the discourse of representation.

The aesthetic experiences we encounter in memes are valuable forms of representation that help us diagnose the main anxieties of our age: our growing dependence on privately-owned technology, the rise of generative AI, the decline of representative democracy, and the soul-crushing mental health crisis underlying it all. Anxiety is both a general societal condition and a rebellion against representation. Existing forms of political representation have increasingly failed to capture the political frustrations expressed online. There is an overwhelming fatigue among many with being online, always feeling like being surveilled and turned into data. In short, anxious aesthetics mediate between the desire to be incalculable and the pressure to be identifiable.

Anxious aesthetics as a visual language



Figure 1 (left) & Figure 2 (right). Degraded memes using their aesthetic form to comment on their place in digital culture. Figure1: @bodylessorgans. Instagram, (account deleted) [Screenshotted 2 October 2022]; Figure 2: Tumblr, <http://mister-boss.tumblr.com>, Sep. 21. 2017 [Downloaded 3 October 2025]

Figures 1 and 2 are memes that use their aesthetic form to comment on their place in digital culture. The subject of each meme, an emoji, is depicted cruelly, very different from the small icons we use in our day-to-day communication. Here, it is grotesquely deformed, violated, bastardized. The level of alteration it has been subjected to is explicit in the low-resolution, highly pixelated image. In figure 2, the gross disfigurement of the famous laughing-crying emoji provokes a certain level of discomfort. The state of mind or mood this image is meant to convey is frenzied. It is a frantic and twitchy image, combining a known symbol with a haunting, unsettled look brought on by glitching and deterioration. The same can be said of figure 1, with its overdrawn and disproportionately large eyes.

The malaise and uneasiness these images arouse within the viewer are deliberate. The impoverished, low-resolution quality of the image is both intrinsic to and aesthetically constructed by these memes. Why does this visual degradation matter? These memes do not only represent anxiety thematically but also embody it in their visual appearance. As memes circulate, they are repeatedly copied, compressed, altered and reposted. Passed from platform to platform, these images lose resolution as they travel, becoming uglier and more degraded. These memes draw our attention to their own altered appearance by featuring the markers of over-circulation: low resolution, high pixelation, and excessive color saturation due to unrestrained filtering.

The memes are comments on their own disposability and alienation within the digital cultural economy. The degraded image becomes a record of its own circulation: the more it is reproduced, the more visibly it bears the marks of the system that distributes it. As figure 1 explicitly states, "In the digital attention economy you either post or die." Crucially, this loss is also embodied aesthetically. These memes intentionally mobilize the aesthetics of degraded images and use blurred, confused, glitched or otherwise discontinuous images to materially mediate feelings of alienation.

These images represent sites of encounter with the logics of digital capitalism. In aesthetically mediating alienation, they comment on the digital economy as a site of production, consumption and circulation. They are images that are both profoundly digital, and profoundly anxious, giving materiality to alienation and nervously manifesting their place within the fast-paced digital economy. These memes therefore do

more than represent the digital economy. Their forms emerge from the processes of producing, consuming and circulating images within it. In this sense, they also engage aesthetically with their own economic context.

The Aesthetic Heritage of Memes

The advent of memes symbolizes the uniqueness of anxious aesthetics; they have only emerged right now within the socio-economic context of digital capitalism. However, the aesthetic traits found in these images are not brand new. The degradation, glitching and oversaturation seen above are aesthetic techniques afforded by new media, but they inherit a long aesthetic heritage. These aesthetic traits are part of an artistic history that far predates our current era. In fact, they manifest the uneasy tension between two aesthetic modes that I define here as "underground" and "surface" aesthetics. Underground aesthetics resist dominant cultural forms; surface aesthetics absorb and commodify them (figure 3). Memes occupy the unstable space between these two forces.



Figure 3. Anxious aesthetics are caught between surface and underground aesthetics. Lucie Chateau Author's own.

Underground aesthetics is a historical mode that speaks to the libidinal and rebellious forces at work in visual culture. This is a subversive aesthetic, unruly and resistant. The aesthetic lineage of underground aesthetics is long, rich and varied. In the twentieth century, remix and montage were key aesthetic modes used by the artists of the Dada

movement, who used collage as a form of political expression and protest. Later, the legacy of these art movements, both in their aesthetic manipulations and political messaging, can be found in the spirit of punk music, and, in the digital context, in the movement known as "glitch art." These artistic movements did not share a single political goal. What they shared was resistance to cultural homogeneity. They encapsulate a desire to rebel against the mainstream by using the tools at one's disposal, recuperating symbols from above to make meaning down below. We can see the same spirit in memes, what Adrian Chen calls a "movement focused on the drama that occurs when you fuck shit up on the internet."¹³

Indeed, various underground aesthetics have existed in many forms throughout history and channel an undercurrent in society, speaking to notions of the subcultural, but they are categorized together here due to their social disposition against a dominant aesthetic order. Underground aesthetics challenge the idea of aesthetic hegemony, desacralizing and de-fetishizing it. In digital media, the aesthetics of glitch and degradation as seen in the memes in figures 1 and 2 epitomize this. As such, underground aesthetics are innovative and productive, creating new meaning out of the little they have. Historically, however, underground aesthetics have also been exploited for their creativity, as a dominant culture continually absorbs their new forms and ideas. In their current manifestation, surface aesthetics often recycle underground aesthetics into commodity goods, like when user-generated memes are turned into marketing campaigns for brands.

If underground aesthetics resist dominant cultural forms, surface aesthetics makes those forms familiar, legible and consumable. Surface aesthetics are cultural structures as they can embody an entire mode of being, performing or interacting with the world. Kitsch is a useful example, because it turns cultural values into recognizable visual forms.

Surface aesthetics has a rich political history as the dominant aesthetic order. Kitsch images are images that put forward a straightforward interpretation of themselves and ask us to go along with this worldview. Kitsch and its relationship to totalitarianism has often made it a tool of fascist propaganda, and the contemporary phenomenon of "slopaganda" demonstrates how this aesthetic logic operates within digital media.¹⁴ Journalists have proclaimed that we are currently in a "Slopaganda era," a portmanteau of the common derogatory terms "slop"

to refer to AI content, and propaganda. The easy availability of AI tools has become an opportunity for political actors, including the Trump administration and far-right parties in Europe and Brazil, to employ AI tools for political messaging. Spread through various channels, the origins of AI-generated content are often unclear. For example, Chinese social media is flooded with AI-generated content that seems user-generated, but in fact spreads government propaganda.¹⁵

This position between the two aesthetic modes gives anxious aesthetics its telltale anxiety. It embodies the liberatory, libidinal potential of networked images while remaining vulnerable to the commodity-flooded marketplace of digital capitalism. The anxiety at the heart of anxious aesthetics captures the tension that defines them – making anxiety manifest both a general societal condition and a boundary-making experience.

Memetic Critique

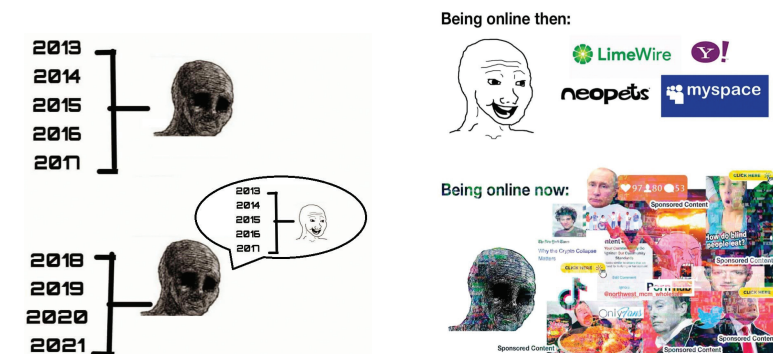


Figure 4 (left) and Figure 5 (right). The Wojack meme, a figure of 2010s disillusionment with platform capitalism, it contains a critique of its own retroactive nostalgia. Figure 4: Tumblr, <https://taiga-fujimura-official.tumblr.com/post/190844787569> June 24, 2021; Figure 5: Tumblr, <https://le-dreadmau5.tumblr.com/post/623883429370626048/we-never-got-to-see-the-club-lit-like-in-those>, Dec. 4, 2022.

In figures 4 and 5, we see this friction in the Withered Wojack meme. The meme emerged from late-2010s disillusionment with platform capitalism, while simultaneously critiquing its own nostalgia for an earlier internet. The fresh-faced Wojack of figure 5 captures the optimism of "being online then," a vague and imprecise past that is only defined in opposition to "being online now". Underneath, the same figure is lifeless,

emaciated and defined by its void-like eyes, the very picture of doom and gloom. The meme draws parallels between this state of feeling and the oversaturated and overpoliticized landscape through a digital collage, commenting on the decline of digital culture due to the rise of platform capitalism.

In figure 4, we find the same Wojak, but nostalgically looking to the past (specifically, the years between 2013–17) as a time of happiness and naivety. However, the Wojak's retrospective romanticization is undercut by the meme itself, showing us that the longed-for time period is only a projected ideal, not a real account of the past. In both these memes we see traces of underground aesthetics, through the aesthetics of degradation, and the cultural structure of kitsch as an oppressive representation of reality. More than anything, though we see anxiety express itself. Though they are variants, the memes contradict each other.

Figure 5 argues that platform capitalism is the cause of the depression and anxiety embodied by the decrepit faces, while figure 4 says that such a simplistic romanticization of the past is misguided, and that the disillusionment felt now has been present for much longer. As such, both memes exemplify the desire for political critique through memes but also undercut this desire by existing in parallel with each other. Anxious aesthetics thus never take a stable form, expressing critique when they can but knowing that their message can always be undermined and co-opted by others with divergent ideologies.

Anxious aesthetics are a departure from traditional forms of representation. They explore the power of the aesthetic and the collective as forms of experimentation with a new way to speak collectively through images. Vitally, they refuse the individual pressure to be identifiable and calculable by remaining unstable, anxious and compromised. Instead, they mobilize the power of the incalculable. The anxiety of the meme, then, is not simply a symptom of life online. It is also a way of registering the contradiction at the heart of digital culture: we are encouraged to participate, but our participation is constantly measured, monetized and made legible. Memes matter because they occupy this contradiction. Their instability can be exploited, but it can also create forms of collective expression that resist being fully controlled or calculated.

A

Within *The Library of the Incalculable*, "A" begins here – with access understood not as a technical threshold but as a relational and ethical act, algorithms of aspiration shaping what users strive for and how they inhabit digital spaces, and anxious aesthetics revealing the affective strategies through which marginalized creators navigate, resist and reimagine their place in the digital public sphere. This chapter seeks to remind readers that intelligence does not begin with AI, but emerges in the human capacity to adapt, to care, and to invent forms of expression and belonging that exceed design, defy optimization, and remain incalculable.

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