Transit Asia Critical Con-cepts

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TRANSIT ASIA AS CONCEPT

Concepts hold the world together. But what happens when the world fragments, explodes in war, faces the epistemic collapse wrought by AI, or the ravages of climate spun out of control? Concepts also disintegrate, lose their self-positing status, their claim to stand above the flux they describe. Maybe this claim to self-grounding was always an ontological fantasy anyway, a conceit of the Enlightenment, of the West. In Chinese thought from the Song dynasty, concepts are tied to the propensity of the times (*shishi*). They come and go. It is not, as Gilles Deleuze said, that concepts are like bricks that can build a courthouse or shatter a window. Rather, concepts themselves shatter with the times. They can self-dissolve as readily as they create and destroy. At the very moment of grasping the world, they may be losing their grip on it.

Abstract units may furnish space as actionable, but their purchase on the world, and on its histories, is never guaranteed. For all the urgency they command within the academy, the legacies of colonial occupation and imperial endeavour resist easy measure within temporal horizons of human continuity and organic contortions that span millennia. Longevity, where it occurs, demands a reckoning.

A dominant tendency within Sino-civilizational narratives upholds the worldview of *tian ming* (Mandate from Heaven) as a foundational concept to account for over 3,000 years of imperial rule. The persistence of *tian ming* owes not to any escape from history, but to the concept's repeated availability to the occasions in which it was required. *Tian ming* is always shadowed by its corollary of rebellion. Historical continuities are riven with ruptures and rivalries, disputes and disturbances. Concepts find potency as political expression; they drift as aesthetic reverie or burst as spectacular eruptions into the placid surface of routine. In the end, duration is not transcendence, and recurrence is not providence. Persistence goes on until it terminates.

What seems like permanence is just the longer arc of contingency. Concept production can flourish and exceed expected constraints while remaining circumstantial to the moment of its unfolding. In other words, concepts are neither here to stay nor assumed as given, and it is precisely this provisionality that makes them worth making. Concepts speak to the conjuncture. Transit Asia is no exception, at once historical and contemporary, anchored and adrift, formal and experimental. As a proliferation of ideas and expressions bound in this instance as a book, Transit Asia institutes

itself as a possibility without certainty, as a compulsion not obliged to orthodoxies of performance.

Transit Asia Critical Concepts emerges from this condition of conceptual instability. The concepts gathered in this book are not designed to map Asia, to fix its contours, or confirm its coherence. They move through Asian environments, across infrastructures of labour and logistics, inside computational architectures and their human remainders, against the unevenly distributed catastrophes of climate and war in ways that exceed the regional frame they inhabit. That excess is not incidental. It is what thinking from Asia produces, a movement beyond the cultural imaginaries, institutional settings, and lived encounters that give Asia its apparent shape.

Civilizational pretensions foreclose this movement. Such claims come from many quarters. The discourse of civilization is a default currency of post-war disciplinary formations such as area studies and international relations; frequently mobilized in nationalist projections of triumphal destiny, it has become a mainstay in collapsing the heterogeneity of peoples into the sovereign command of populations. Yet every civilizational assertion is shadowed by what it cannot contain. Each articulation—whether imperial, nationalist,

or disciplinary—is tested when confronted with differences it cannot absorb, the outside from which its identity dissociates. Asia has never simply been itself. Internally fractured and historically sedimented, it is as estranged from its own self-imaginings as from the categories imposed upon it from outside.

The concepts in this book do not stabilize that difference. They work within and around it. That working within and around produces its own unevenness. Some concepts in this collection are analytically precise, building their arguments with care and explicating the technical, historical, or political dimensions of their objects. Others are lyrical and suggestive, opening to a field of association rather than closing it with definition. Others still are deliberately opaque, preferring allusion to explanation, circling objects and experiences that resist or refuse the burden of knowability. Finally, others are images, visual crystallizations or evocations rather than written tracts. This unevenness has a logic. It is the signature of a project that brought together academics, artists, and activists from across Asia and beyond, each with their own intellectual formations, aesthetic commitments, and different stakes in the act of concept-making itself. The diversity of approach is an effect of the project's premise: that no single mode of concept

production can hold Asia, or the world seen from Asia, adequately.

AESTHETICS, ENVIRONMENT, GEOPOLITICS, and TECHNOLOGY—the four sections of this book—are not stable disciplinary containers but force fields that cut across one another. These are the domains in which the fragmentation described above is most acutely felt: where digital technologies remake the conditions of perception and knowledge, where extraction and displacement reorganize landscapes and lives, where geopolitical realignments unsettle inherited territorial and jurisdictional frameworks, and where aesthetics returns to the grain of sensation, to feeling as a social and political fact, rooted in bodies, in labour, and answerable to the damaged worlds it inhabits.

Preceded by two online preparatory sessions, *Transit Asia Critical Concepts* emerges from a workshop held at Nanyang Technological University's Centre for Contemporary Art. As such, the book took shape at the cusp of the Indian and Pacific oceans, on an island whose territory is dotted with data centres, whose economy is anchored in petrochemical refining, whose narrow surrounding straits carry some of the densest shipping traffic on earth. The space that hosted the participants is housed in former military barracks, a palimpsest of

colonial garrison and cultural institution that is itself a concept waiting to be written. The location was constitutive. To think about digital infrastructure, geopolitics, labour, and extraction from this particular site is already to think from within those processes rather than about them from a distance.

The workshop was convened by the Transit Asia Research Network, a collective dedicated to examining the geopolitical transformations reshaping Asia and the wider world, including conflict, inequality, and the long unfinished business of colonial power relations. The network brought to the project its geographic span and its conviction that Asia's transformations demand more than any single mode of inquiry can provide, that they require at times forms of knowing that are allusive, atmospheric, resistant to conclusion.

The project was supported through the Human Craft in the Age of Digital Technologies initiative of the Consortium of Humanities Centers and Institutes, a program that asks what digital technologies, AI, data systems, and algorithmic governance are doing to creative and intellectual life, to cultural production, and to human agency. This framing of the human and the digital as sites of restless inquiry, embracing panic as much as critique,

gave the workshop its broader intellectual trajectory, and runs as an undercurrent through every concept gathered in the pages that follow.

Dispensing with the academic valorization of single author attribution, the collectively written concepts assembled in this book make no claim to comprehensiveness or stability. They are offered as orientations rather than arrivals, provisional handholds in terrain that shifts beneath the act of writing itself. They come from a particular site, a particular moment, particular bodies, brains, and histories. It is this particularity, rather than any claim to coverage or systematicity, that gives these concepts whatever grip they manage to hold on an increasingly ungraspable world.

AESTHETICS

Abjection
Alienation
Anxiety
Authentic
Avatar
Beauty Labour
Datamoshing
Experience
Fetish
Flatness
Form
Futurisms
Immersive
Interfaces
Interventions
Materiality
Memes
Neon
Nostalgia
Pixel
Polyvocality
Re-Existence
Textures
UwU

AESTHETICS

Aesthetics, which is always political and technological, has a fraught relationship between desires, commodities, and tastes as distinct from the idea of beauty as an objective ideal. This tension has become more complicated in the digital age in the context of anti-aesthetic or non-aesthetic practices, and the glitch. Appreciation, judgment, and the protean concept of "aesthetic" reverberate, reconstitute, and reorient, as do the compulsions to possess, to confront and agitate, and to design legibly. Perpetuating and celebrating, or alternatively criticizing and debunking the norms and values embedded in aesthetics enable variable modes of working through culturally conditioned values around the past, present, and future of sense-making and sensory understanding. The entries selected, written, edited, rewritten, and debated here reflect an assortment of concerns that attend to the material conditions of art, design, and cultural production while also attentive to the underlying politics and history of those conditions.

An aesthetic reading of terms related broadly to digital and internet culture offers a glimpse into the cultural weight of twentieth and twenty-first century software, hardware, and mechanical elements. The aesthetics of those

legibly technological terms invokes phrases related more historically to modernism or postmodernism, not to situate the digital as an inevitable evolution of earlier times, but to reprise these historical concepts and their utility during times of anxiety and crisis. Abstract concepts with cultural currency, and terms with technical or subcultural origins that might not yet be in common use in critical and scholarly discourse, also complicate the ways in which aesthetics can be understood in an age of increased dematerialization.

The cultural territories that situate these concepts reflect the perspectives of a diverse group of authors with cultural and professional ties to South, East, and Southeast Asia, creolized and expanded. They also draw on the vocabularies of Euro-America and Australia, registering the precarious condition of aesthetic perception in the 21st century as indelibly linked to coloniality. These perceptions are simultaneously globalized and globally accessible, enabled by flows of capital and cultural power that have established something akin to a common lineage of modern and contemporary theory, and impossibly provincial, astutely local, and generation-specific.

The task of addressing aesthetics in this oblique way is not to definitively settle or encapsulate the terms with succinct statements,

but to sit with the terms, thinking through the myriad ways in which they speak to distinct disciplinary backgrounds which have themselves evolved far beyond their origins. Aesthetics is always psychological, sometimes sensorial, and usually multidimensional. Through expository writing, tongue-in-cheek phrasing, and critical commentary, each concept is presented as part of a complex array of professional and amateur "users" as well as a web of connotations. These brief entries evoke a creative interest in visiting or revisiting terms that might not otherwise be seen as current or worthy of discussion in the context of digital governance—either because they are technical and simply defined, or because they are expansive and almost impossible to pin down.

While in a few cases the terms are glossed with reference to the historical European authors who have become synonymous with them (Marinetti for futurism, Bakhtin for polyvocality, and Kristeva for abjection), the majority of entries are discussed as generally as possible. This approach acknowledges the semantic broadening of language and the inability to isolate specific contextual, professional, or cultural uses from one another. The concepts, which range from the technical to the poetic, subsist in a space of incompleteness and awkwardness. Seeing the selection of terms

assembled here foregrounds the flexibility of aesthetics within digital contexts—not a cohesive or values-coded aesthetics but protean and emergent, layered with human emotions and anxieties. The urge to preserve connections to heritage and analog culture, and to suture those 19th and 20th century tendencies to our current screen-enabled telegenic moment resulted in a riotously diverse group of terms that can be productively juxtaposed as easily as they might be synergistically hyperlinked.

Not completely free of influence from an aesthetic realm that includes the "poor image" of Hito Steyerl or the plurality of Yuk Hui's "cosmotechnics," the aesthetics of this endeavour offer an exquisite corpse of words and phrases. In this agglomeration, beauty labour is more productive to discuss than the notion of beauty itself, and the physical and digital aspects of textures offer recursive and open-ended comparison.

UwU.

ABJECTION

Abjection as a critical concept was developed by Julia Kristeva in the 1980s as she was writing on horror. She conceptualized abjection as "violent and dark revolts of being," something which is beyond the limit of the tolerable. According to Kristeva, abjection is neither subject nor object and often disrupts the liminal space between the symbolic and imaginary. The abjection refers to unimaginable horror, the appalled state of an object, the representation of a degenerated body. Abjection in art, therefore, contradicts the classical aesthetics based on beauty.

The grotesque in 18th-century art can be traced as an early source of abjection in modern art. The representation of deformed human bodies in Victor Hugo's gothic novels like *The Hunchback of Notre Dame* and *The Man Who Laughs* can be cited as examples of abjection. Abjection disrupts the self/symbolic by importing the horrific, ugly, deformed, and disgusting. Pier Paolo Pasolini's *Salo* or the slashing of an eye in Luis Buñuel and Salvador Dali's *Un Chien Andalou* are good examples. The moment of abjection, therefore, often provokes the sudden propping up of "the real." An extreme and unmediated sense of otherization may lead to an abject taste for misogyny, sadism, genocide, and xenophobia. In the age of social media with a collective obsession with aesthetic perfection, meanwhile, abject digital personas and avatars can be a form of resistance to the economics of youth and beauty.

ALIENATION

Alienation refers to the estrangement of a person from other people, material, and feelings. In terms of performance art, Brechtian alienation refers to the expected effect of the show to distance the audience from the character to a “critical distance,” where the audience could reconsider the performer’s actions and utterances rather than simply empathizing with the characters. Alienation also refers to the condition where workers are alienated from their work because of the separation of means of production from actual work, as explained by Marx. Foucault’s notion of biopolitics can be seen as a powerful rearticulation of alienation in the Marxist sense. While this concept has long been influential and criticized, it is enjoying a resurgence in the new millennium, when digital technologies drive another industrial revolution.
If alienation is a prolonged crisis, it is aggravated. Today, under the collusion of neoliberalism and technological monopolies, governance becomes ever more subtle and insidious. Under the veneer of WFH’s convenience and comfort, workers are cut off from building solidarities with others. The individual worker is separated from social relations and work environment. The boundaries of work and life are blurred. Those who work to build this system, such as software engineers, also do not own their work product. The platform and corporation take ownership of the product. A sense of disconnection can result from constant connectivity, automation, and robotization as everything seems to happen at a distance online, devoid of human contact and one’s control. AI technology is also a black box with which we interact without being fully aware of its omnipresence. Alienation can be used as a tool for a totalitarian state or political order to control its citizens as self and sovereignty are erased in the face of pervasive monitoring. Cooping strategies such as hikikomori, cocooning, and laying flat (躺平) have emerged as a response.

ANXIETY

Pervasive, underlying existential fears with no specific object. Unease, dread, doubts, felt by displaced and marginalized populations, or equally by economically advantaged populations burdened with the weight of emotion and a lack of connection. Anxiety differs from fear in lacking a concrete object, instead manifesting as a general condition of modern existence. In the last century, cold-war anxiety worldwide and post-independence anxiety in Singapore are cases about the sense of anxiety. Both reflect past and current issues and a worry about future problems. In the contemporary influencer economy, anxiety is a source of income for those selling fixtures and supplements geared at self-regulation and reducing stress hormones, through both addressing existing anxieties and introducing new ones. This commodification points to anxiety's role not merely as symptom but as productive force in digital capitalism. Bodies materialize anxiety differently across cultures, though increasingly channelled through global technological interfaces. Doomscrolling, digital surveillance, personal data breaches, malware, TikTok brain — all causes and effects of anxiety in the digital age. Yet these anxious states sometimes generate collective responses and new forms of solidarity that challenge the isolating nature of anxiety itself.

AUTHENTIC

Authenticity transforms across time and space rather than existing as fixed property. As Walter Benjamin illuminated through his concept of “aura,” authenticity was traditionally anchored in an artwork’s unique presence and unrepeatable origin. Mechanical reproduction through photography and film disrupted this paradigm, democratizing art while transforming its relationship to originality. Digital technologies renew questions of authenticity as AI-generated content blurs boundaries between human craft and machine output, creating anxieties about creative labour and ownership. In a sense, photography and film are to Benjamin what AI is to our age of digital technology. In heritage studies, the criteria for authenticity are rooted in specific historical moments and cultural landscapes. Western heritage frameworks often privilege antiquity and preservation, while practices like Chinese “shanzhai”(山寨) or Japanese architectural renewal challenge this authenticity through adaptation rather than static preservation. Authenticity is not a result but a process that needs to be constantly reconstructed. It exists in tension with intervention, each simultaneously threatening and constituting the other in an evolving dialogue between preservation and innovation.

AVATAR

Known to be a Sanskrit word meaning “incarnation,” the term “avatar” drifted from its spiritual and philosophical connotations, now popularized as a technological lexicon through films and games. In Hindu belief, the deity Vishnu embodies different intermediary avatars to compartmentalize divine virtues that reflect earthly ethics and morality. For example, the fish connotes a survivor or the boar connotes a strong warrior. Abstract values such as humility, determination, or even violence which can be cloaked on and off are represented visually. The more famous adaptation of the term “avatar” began in 1985, game developer Richard Garriott designed *Ultima: Quest of the Avatar*. An animated television release, *Avatar: the Last Air Bender* created by Michael Dante DiMartino and Bryan Konietzko was released in 2005. Director James Cameron’s released *Avatar* (2009). Most popular culture adaptations were truthful to the metaphysical and phenomenological weight of the term. Extending to today’s implication of the term in human-computer interaction, more prominently in virtual worlds, an avatar is a digital image crafted, manipulated, and adjusted by the computer user it represents. A user or player’s avatar (a resilient fish or a mighty boar) is re-embodied with creative agency, and can be animated by different quests, skins, accessories.

BEAUTY LABOUR

Women are obligated to be “beautiful” since long. While the beauty practice is across various cultures, it is predominant in a contemporary East Asian context where fissures appear in how women relate to expectations and desires around beauty. Some willingly conduct beauty labour, while others are proud to be not beautiful and reject beauty duty. Many women wander somewhere in-between these two poles. The beauty practice became increasingly cruel and harmful to women in contemporary society. The expanding beauty economies, such as plastic surgery, fashion, and cosmetics industry, take advantage of the post-feminist association of individual action and choice, convincing women to change their body and face to fit certain beauty standards. Such beauty standard are socially constructed and can be exemplified by certain class, gender, or industry norms that often conflict with how women see themselves and their respective interests until they become standardized as expectations and applied to evaluate women. The automated but highly adjustable beauty filters mounted on smartphone and algorithms are popular among netizens, where the not-beautiful and “natural” portrait became increasingly rare. Such self-beautification of women requires a massive investment of energy, time, and capital. The “beauty premium” has become one of women’s most redeemable forms of capital. The concept translates as *meiyi* (美役 in Mandarin), intimating a performative dimension to beauty.

DATAMOSHING

Technically speaking, datamoshing is a deliberate and desired compression of video images. Datamoshing is regarded conventionally as aesthetic chaos and entropy that disturbs the prevailing aesthetic regimes. In the era of digital-computer-biology-reality (image) connection, this technical-aesthetic development is motivated by enhancing aura to "improve" the image (Photoshop, colour correction, lens effect correction). Alternatively, a deliberate attempt is engineered to degrade the effect of "seamless" realism and the "quality" of the image. Datamoshing is a production of an imperfect digital copy of that which is external to the image world (reality)—a duplicate that is not a clone or perfect reproduction of the so-called original but a degenerated audiovisual or visual (anti)aesthetic output that proposes an alternative sensory simulation. The digital technologies of data compression in general attempt to produce an ideal genotype, but datamoshing consciously invokes glitch and degeneration in an audiovisual output in terms of resolution, colour, pixel, speed, figurative proportion, framing, aspect ratio, and so forth. Datamoshing explores the cybernetic potential of digital images and exposes digital codes by destroying the textured quality of analog images. Pre-digital avant-garde experimentation, like the production of psychedelic images and analog scratch films, precedes datamoshing. Datamoshing is an important digital technique for producing avant-garde images in film and digital art.

EXPERIENCE

Diffuse yet minutely engineered, experience displaces goods and services. Beyond form or function, experience triangulates emotional responses related to functionality, sensory stimulation, and knowledge creation. Seemingly spontaneous, experiences are increasingly designed through psychological research, data analytics, and iterative beta-testing, enabling subtle manipulations that build trust and engage with subconscious desires. Experience exists in a productive tension: simultaneously an optimized version of reality and a site for embodied meaning-making that eludes complete capture. In contrast to the ephemeral and unpredictable experiences of late-20th century art practices that explored performance-based relational aesthetics, 21st century experience is often a celebration of predictability, marketability, and enhanced engagement. Instead of prioritizing access to the authentic or singular, contemporary experience offers a decentred event quality and mass customization. Dynamic rather than static, flexible rather than rigid. Yet this seeming democratization often masks new inequalities regarding who designs, accesses, and benefits from engineered experiences.

FETISH

Fetish in general means craving for some object, commodity, and obsessive desire for something or some act. The concept originated in colonial encounters with West African religious objects prior to theorization in modern contexts. In Marxism, commodity fetishism describes how production relations are obscured, with value mislocated in exchange relations and appearance rather than labour. In psychoanalysis, as explained by Freud and Lacan, fetish is a psychic mechanism where the self obsessively attaches to an object in order to negotiate the castration anxiety in an external, symbolic way. Feminist critiques reframed fetish from lack-based theorization toward performative practice with liberatory potential.

In contemporary digital contexts, fetishism characterizes our misplaced investment in technologies, attributing autonomous agency and intrinsic value to technological objects beyond their material capacities. Digital fetishism manifests when we worship seamless interfaces while ignoring underlying systems, treat algorithms as objective oracles rather than human constructions, or experience phantom device sensations. In Asian contexts, where manufacturing meets consumption, fetishism appears in ritualistic product releases, technological nationalism, and platform dependencies masked as social necessity.

FLATNESS

Flatness operates as both a material condition and conceptual paradigm across disciplines. Geometrically defined as an even, uniform, two-dimensional surface lacking three-dimensionality, flatness carries multiple cultural connotations. In visual art, flatness has transformed from a limitation to be overcome to a fundamental property to be acknowledged and embraced, as seen in modernist movements like Cubism and collage that consciously emphasize the materiality of their flat supports. In negative cultural terms, flatness refers to an idea or a concept that lacks sharpness and depth. In visual art, flatness indicates a lack of perspectival depth in an image. In photography and videography, the flatness of an image varies according to the type of a lens, control of focus and depth of field, and the composition of the frame.

Flatness is a paradox in our modern life. Most of our screens and display boards are flat, but the images they contain are often three-dimensional and hence negate the materiality of flatness. The digital flattening of hierarchies between creator and audience, professional and amateur, original and copy promises democratization while algorithmically reinforcing new forms of stratification. Flatness simultaneously erases certain distinctions while reinforcing others in ways that often remain invisible precisely because they operate on the seemingly transparent plane of the interface.

FORM

Forms mediate our sensory engagement with the world, structuring perception in advance of meaning. While traditional humanities disciplines developed specialized vocabularies for different cultural forms (literature's narrative structures, visual art's compositions, music's patterns), digital technologies have created hybrid configurations where text, image, sound, and code interpenetrate.

Tracing forms is a technique that discerns the contours of conflict, transformation, and resistance. The classical dichotomy between "form and content" has evolved into what media theorists recognize as "media and content" in our digital environment. Social media platforms exemplify how forms are not passive containers but active mediating structures. Form constitutes experience and subjectivity. The interfaces and algorithms of form shape content production and consumption. Form conditions ideological dimensions and commercial imperatives. Platform architectures encode political values that subsist within the guise of so-called technological neutrality, privileging certain expressions while rendering others invisible or illegitimate.

In Asia-Pacific contexts, forms index historical traces and political significance. Aesthetic forms are imbued with imperial legacies even as they provide resources for decolonial reimaginings. The tension between global digital standards and local aesthetic traditions reveals the dual capacity of forms: they promise unlimited creative possibilities while simultaneously constraining potentialities through algorithmic architectures that reproduce existing inequalities in access and representation.

FUTURISMS

Published in the Parisian newspaper *Le Figaro* in 1909, Filippo Tommaso Marinetti's "Manifesto of Futurism" called for a new artistic philosophy. Marinetti's futurism envisioned new modes of cultural rejuvenation by embracing technology and speed, destroying the vestiges of literary and artistic culture devoted to "pensive immobility." Praising progress and transformation in conjunction with violence, the manifesto skipped in line with prevailing Italian fascist political discourse. Despite this rightist political lineage, and the manifesto's extremist agitation to "demolish museums and libraries, fight morality, [and] feminism," it has had lasting and international cultural influence across different kinds of artistic creations as a means of exploring uncharted territories of the future and breaking with the past. Two prevailing 20th and 21st century trends warrant closer examination: science fiction and ethno-futurisms. Canadian science fiction writer Nalo Hopkinson astutely pointed out that the act of being a person of colour engaged in science fiction often carries the weight of suspicion, implying the internalization of one's colonization. By exploring a fantastical side of scientific positivism, speculative futurists forge entirely new dreamworlds, free from the shadow of colonial legacies. Ethno-futurisms, which encompasses subgenres including Afrofuturism, Indigenous futurism, Arab Futurism, and Asian Futurism, delve into different facets of a future liberated from a Euro-colonial master narrative. At once reflections of historical events and contemporary anxieties, they mine the cultural faultlines of racism, identity, geopolitical concerns, and socio-cultural complexities, expressed by occupying a tech-enabled future in art, film, literature, and design.

IMMERSIVE

Blending physical and digital elements, an immersive environment endeavours to engage with different bodily senses to create the sensation of being in a space different from one's physical reality. Such spaces can also be created in a digital environment such as in the metaverse, where an entire universe is designed and simulated for interaction between characters. Immersion is often associated with innovative digital technologies such as touch screens, sensors, high resolution light or hologram projections, multi-channel sound, and mixed reality technology. Immersive experiences frequently employ a futuristic audio-visual style, with the goal of experiential seamlessness and continuity. However, computer hardware and connections to wifi and power are necessary to sustain these illusions. Artists increasingly enlist immersive design to create artworks, giving renewed significance to the concept of *Gesamtkunstwerk*, a German word meaning "total work of art," describing a creative process involved in combining different art forms to make a cohesive whole.

INTERFACES

An interface is a point, a surface, ground, boundary, or border of interaction between different components or entities within closed or open systems. More commonly, the interaction occurs between a user and machines. An interface affords function through communication of data and information between software and hardware. An interface may rely on common protocols and standards that make possible interoperable or modular functions and affordances. In the 21st century, at the dawn of the age of ubiquitous personal computers, broadband Internet, flat screen displays, mobile devices, and kiosk terminals that replace human customer service agents, the user interface manifests a visual vernacular of a hyper-designed surface or ground that facilitates sensorial—often tactile and, more recently, sonic—and cognitive experiences. Perception and meaning, especially for the user, became determined by visual and often embodied design. The interface implicitly conveys the capitalist logic that underpins human-computer interaction, the aesthetics of usability, and the ever-evolving socio-technical art of user experience design. In turn, the mediated interface is also conditioned by social, political, and economic factors.

INTERVENTIONS

Interventions operate across scales, from individual gestures to institutional actions. They may be subtle infiltrations or dramatic ruptures, but all share a capacity to shift what was previously assumed as fixed. Crucially, intervention implies agency—a conscious decision to alter rather than accept prevailing conditions. This agency may reside in artists challenging sensory hierarchies, activists disrupting political narratives, or programmers altering algorithmic scripts. In digital environments, interventions expose the political dimensions of seemingly neutral technologies. Artists across Asia deploy glitches, data visualizations, and platform manipulations to confront emergent regimes of surveillance and algorithmic governance. The woodcut movement in 20th century Shanghai exemplifies this tension, directing attention toward workers rendered invisible by commercial media while participating in nation-building narratives. Similarly, contemporary digital interventions across Southeast Asia simultaneously challenge Western platform monopolies while risking new forms of technological nationalism.

MATERIALITY

Materiality is more than just substance. It constitutes an active force that shapes perception, affect, and meaning-making. Digital technologies often appear weightless, virtual, or purely informational. Yet, paradoxically, they depend on and shape the matter of material infrastructure: from rare earth mines to fibre optic cables and energy-consuming data centres. This inherent tension between digital immateriality and its material dependencies creates a productive threshold. Materiality is where global power dynamics are enacted through resource control, where labour conditions are physically experienced, and where environmental impacts are registered across diverse geographies and bodies. Material foundations are frequently obscured or displaced, rendering the physical costs and consequences of the digital invisible or remote. Abstraction is the shadow of materiality. Engaging with materiality through analytical inquiry and creative practices requires tracing these often hidden connections and understanding the ethics of their uneven distribution. Materiality invites an attention to things and their material surroundings: tangible as infrastructure and artefacts, intangible as algorithms or sound. The examination of materiality goes beyond a close reading of these things, and more importantly focuses our *objectification* of them: how the human subject's ungraspable feelings, spheres, and spirits became solidified on these things? With a definite emphasis on the thing, the exploration on materiality posits a dual question for Asia, as asked by Pang Laikwan: how to deploy materiality to account for Asian history and its modernity, and how to understand the Asian thing or material object more directly in tandem with cultural mediations?

MEMES

A meme is an internet based humorous or satirical image typically derived from popular culture. Memes will often collage juxtaposing words and images, which might also consist of animated GIFs. Memes are widespread media-cultural forms in an era of digital communication notable for its quick reproduction of image and text. The provenance of memes is often ambiguous, forgotten, lost, or just never known. Duplication and circulation are what matters. Memes take on viral qualities as their message is shared and frequently adapted among netizens. In their ephemerality, memes suggest a certain lightness while embodying a specific meaning, implication, or atmosphere. Needless to say, memes remain open to interpretation. Their relatability is key as they traverse different internet communities. The quality of the image becomes rather worn-out. It is an “anti-depression” tool — the poorer or more hackneyed the image, the more funny it is. Memes are a cultural transposition between different communities and regions in a virtualized borderless situations, but they are still limited by certain generational and linguistic gaps. The meme is bound to copyright law and has no authorship. The update and turnover speed is very fast. Memes can come from a top news item of the day or from residual popular culture. Memes are present through the constant transformation of dialogic contexts. They seem to fill in the gaps between textual meanings and expressions. Memes circulate horizontally and are shared very rapidly following a rhizomatic pattern via we-media and self-media.

NEON

Neon glows. The magical delight of neon is technologically related to the fact that extremely bright colours of illumination are derived from electricity running through noble gases contained in glass tubes. These gases are physically colourless but each can emit a radiant colour. Orange light is illuminated by neon gas, blue by argon, yellow by helium, and red-pink by hydrogen. A combination of the gases creates secondary colours. The era of neon signage that peaked from the 1920s to the 1960s is particularly associated with the spectacle of urban nightlife in New York, Las Vegas, Los Angeles, Tokyo, and Hong Kong. The 20th century economic success of these East Asian cities and their storied roles as hubs of east-west finance and trade are closely associated with the rise of the urban consumer class. Neon-lit urban streets and advertisement billboards populated metropolitan life, especially cosmopolitan consumer cultures of the 20th century. The neon-drenched city was important in portraying a futuristic cityscape as depicted in cinema and science fiction literature. *Bladerunner* is the standout mish-mash film of neon billboards, endless rain, eclectic architecture, and hybrid street life invoking an imaginary of an Asian future-present. In the 21st century, neon has been largely replaced by LED signage due to the former's high energy consumption and use of hazardous materials. The now-nostalgic aesthetic of neon is the aesthetic of legibility, of accessibility, and of capitalism with ample room for local culture. Go to any city in China nowadays and neon is a fixture of capitalism with socialist characteristics.

NOSTALGIA

Nostalgia simultaneously preserves cultural memory and erases historical complexity. Idealized pasts, built from the physical remains of change, mobilized in the present, and reimagined through creative intervention. Nostalgia emerges at the intersections of disruption, memory, and desire. While undergoing transformations that destabilize cultural practices and social relations, societies seek coherence through selective remembrance of seemingly more stable pasts. Nostalgia is a pleasant memory. Harsh edges become softened. It invokes the “presence” of a cherished past to fill some “absence” in the present. Nostalgia is a psychic process that veils and masks painful memories with wistful narratives and images of the past. Nostalgia has been the lifeblood of popular cinema, literature, and paintings. The feel-good factor associated with landscape paintings and landscape photographs often originates from a modern cultural nostalgia about a serene countryside, one ravaged by processes of urbanization and industrialization. Cinema as a medium has successfully exploited nostalgia as a theme or stylistic motif by recreating a romanticized past. Digital technologies help construct huge archival warehouses for storage of time past, creating conditions for perpetuating nostalgia and providing tools for its expression and commoditization. Whatever is remembered, circulated, and valorized individually, collectively, and institutionally is shaped by power relations, cultural institutions, and platform architectures that vary across regions, materializing in both intimate objects and monumental heritage sites. Nostalgia is a form of recycling depleted of futurity.

PIXEL

A pixel is a “picture element” that comprises the building block of a digital image. As the smallest addressable unit, pixels compress reality. They fragment the resolution of visual information. Before pixels, there was no concept of the smallest unit in photographic and moving images. In the 1980s, computer graphics and digital still cameras began measuring image resolution in megapixels counts. More technical and expensive cameras were marketed at higher pixel counts. In digital cinematography, pixels became more relevant as computer-generated images (CGI) were normalized. Beyond its technicality, pixels mediate social and economic class as visual representations. Blockbuster films and AAA video games can afford high resolution and frame rates. Premium theatres or expensive consoles are necessary to view Ultra High Definition (UHD) images. Pixel resolutions also can signal divisions in social class. Movies like *Tron* (1982) and *Terminator* (1991) suggested a high-resolution scene as true, real, civilized, or human, while a pixelated point-of-view offers a more mechanical and distorted perspective of a rogue robot or non-human beast. Budget films and independent game developers can also offer distinct visual experiences appreciated as nostalgic pixel art, retro aesthetics, or low-brow productions. The aesthetic condition of being “pixelated” is also a discourse on the politics of visibility and censorship. Having access to high or low resolution of films, artworks, and photographic images are also mechanisms for claiming authorship and protecting copyright ownership.

POLYVOCALITY

Mikhail Bakhtin's idea of polyphony in literature refers to multiplicity in narrative structure or narrative voices. Polyvocality has a much wider scope in critical theory, particularly across social science and humanities disciplines. Incorporating multiple perspectives within methodological strategies and content production, polyvocality attends to minor or marginal narratives that are suppressed or silenced by dominant social and political frameworks. Polyvocality questions who speaks, who is spoken for, and how institutional frameworks mediate diverse voices. In archiving, the concept and curatorial practice can help us access different accounts of minor voices situated in the past. Developing a polyvocal archive and heritage management can contest dominant colonial or top-down narratives of history and thus contribute to decolonial histories and record keeping. Polyvocality can be very usefully applied to the feminist praxis of intersectionality, vocalizing the multiple perspectives of how women are suppressed by their manifold social identities. However, polyvocality remains a complex practice with inherent tensions. Hegemonic institutional structures continue to mediate and potentially constrain multiple voices, even in seemingly inclusive projects. Certain voices may remain marginalized even within polyvocal approaches, especially when framed within discourses of conventional broadcast media or cultural institutions.

RE-EXISTENCE

Re-existence is a concept related to decolonization praxis in art. It is an idea that refers to confronting colonial homogenization by reaffirming the existence of the excluded notions and community aesthetic practices in the realm of everyday sensibilities. Re-existence, as a critical concept, intervenes in the field of common visual experiences, urban planning, archiving, museum building, architectural design, ideas of costume, paintings and sculptures for public display, and other fields of people's culture and public art. Re-existence is not merely a simple claim to resist the legacies and continued instantiation of colonial power, replacing colonial imaginaries with expressions of repressed indigeneity. Rather, it brings in the idea of "pluriversality" that contests Eurocentric notions of universality. Re-existence projects indicate the incompleteness of colonial and elite rationales of art and history of art by re-invoking in practice certain elements from community cultures that were repressed by colonial powers and therefore forcefully excluded from public discourse. Re-existence in art practices often exposes the shadowy side of exclusionary colonial modernity to expose the epistemic erasure of indigenous knowledge and culture and provoke the audience to critically engage with everyday modernity. Re-existence has been widely used among Brazilian decolonialist thinkers and practitioners, initiating a new geo-temporal unification of the global south as a global project.

TEXTURES

Textures exist at the interface between touch and sight, material and digital. In a world increasingly mediated by smooth screens and algorithmic processing, textures persist as sites where irregularity challenges standardization. The imperfections of handcrafted surfaces embody forms of knowledge that computational logics cannot fully capture or reproduce—from the hand-embroidered textiles of Southeast Asia to the weather-worn temple stones of South and East Asia. Texture makes surfaces legible through tactility. The Braille method of writing and reading is based on the fundamental relationship between texture and tactility. Rhetorically, textures invoke nuances and differentiation. Digital technologies simultaneously erase physical textures through glass interfaces while obsessively recreating as simulations. This remediation transforms texture from direct haptic experience into a mode of seeing that evokes tactile memory. The flattening of texture parallels the smooth indifference of contemporary society, where frictionless efficiency eliminates meaningful differentiation. Each irregular surface thus becomes political, challenging the myth of universal digital surface life with edges, obscuring the material foundations of an otherwise immaterial existence.

UwU

UwU, intended to represent a cute smiling face with closed eyes and blushing cheeks, is an example of emoticon or *kaomoji* (顔文字), a symbolic code that first emerged in the 1980s and gained subsequent popularity using letters, numbers, or special characters to construct an image that often depicts a cute or comical facial expression. Text is used as image, characters take on new characteristics, and this digitally-born lexicon seems fundamentally ethereal, the opposite of “concrete” poetry. Emoticons take their inspirations from internet culture and popular culture media such as manga, anime, and video games. Some can be ambiguous. They are mostly used informally in online or SMS chats. Sharing and communicating through *kaomojis* imply an affective proximity with the interlocutor, but excessive usage can be interpreted as annoying or perfunctory. See samples below.

:)	smiley
¯\(ツ)/¯	shrug
囧	embarrassment
(๑•̀ω•́๑)	happy and cheerful
(°口°)	surprised
ก็ʕ•͡ᴥ•ʔก̋	a little bear waving its paws
OTL	defeat, exhaustion, despair

ENVIRONMENT

Aspects
Atmosphere
Contamination
Decay
Disturbance
Drift
Entropy
Flux
Fusion
Harvest
Indicator
Invasion
Kinetic
Microcosm
Mitigation
Monsoon
Noise
Parameter
Symbiosis
Residue
Species
Translation
Tributaries
Variable
Vector

ENVIRONMENT

Environments organize. As both context and condition, environments pattern the world. Environment fizzes with entropic potential. Entropy introduces disorder. Environment orders disorder. Environments are not without limits, they are not boundless. Yet their horizons are not determined. Environments have a plastic propensity, parameters adjust in response to the reverberation of signals. As envelopes of the eventful, environments are containers of contingency.

Environment and media are not mutually exclusive or separate domains. Environmental media are an ensemble apparatus comprised of technical devices in concert with organic and inorganic elements with mediating qualities. The combined effect generates and is constitutive of a communication system. Historically, the production of value is conditioned by a constitutive relation between humans and machines. The environment of operation specific to different media of logistics amplifies the human-machine relation to encompass machinic ensembles that, broadly put, scope the organic and inorganic as domains to optimize and extract value from in the composition of capital. The environmental understood as externalities specific to the milieu

of operation invades and antagonizes the imaginary with the force of contingency.

Environments mesh in a flux of disorder and decay within cybernetic systems once imagined to first channel and then control sustainability—or what Stafford Beer terms viability. Such visions of futurity were premised on the ordering of economic, ecological, and epistemic relations. Recent writings in media theory and critical infrastructure studies derive the idea of environmentality from the margins of Foucault, extending his more prominent concept of governmentality to encompass a field or topology of relations governed by forces distributed within and across a social-technological milieu. The current period of environmentality as a mode of governance registers an interregnum in the wake of a brief post-Cold War period whose grand schemes of a multipolarity balanced by economic interdependence rather than military deterrence failed to inspire global hegemons.

What are some of the key sites, material forms, and modes of subjectivation that instantiate technologies of environmentality as that which surrounds the surrounding environment? Moreover, how might we discern a regional inflection to the concept and condition of environmentality, one that imbues the term with qualities peculiar to a constellation

of relations evocative of "Asia" broadly understood? These general framing questions orient the collective crafting of concepts gathered here under the mantle of Environment.

ASPECTS

Aspects offer a viewpoint of terrain. Like a compass, an aspect orients the direction of a subject as they face the world. Distinct from a gradient, contour, and relief, an aspect is determined by the direction of the steepest descent. There is no pathway to heaven. Aspects plunge directly to hell. Geographers measure aspects in degrees from the north. Southern facing aspects invert the celestial gaze of observers. From this vantage point, one may be excused for extra-planetary visions.

ATMOSPHERE

Atmosphere is the invisible embrace that surrounds, defines, and influences a space, not merely through physical presence but through the subtle currents that ripple through its layers. Much like the air, the atmosphere is both essential and unnoticed, shaping moods, actions, and interactions without ever fully revealing itself. Atmosphere is the intangible collective tone that emerges from unspoken cues, the weight or lightness in the air, influencing how people behave or connect. Just as weather patterns shift in response to unseen forces, so too does the atmosphere of experience, fluctuating based on emotional currents, tensions, or harmony. Atmosphere is the mood conveyed through signals, through words, sounds, or visuals—an ambiance that transcends the tangible and touches on the psychological or spiritual. It is the space between what is said and what is felt, shaping narratives and occasions in ways that logic or reason cannot fully explain. Atmosphere is the unseen force that pulls us into its orbit, ever-present yet elusive, guiding the flow of life without ever being fully captured or contained. Atmospheres are powerful as sensations without unaccountability.

CONTAMINATION

Contamination breaks borders. As toxic intrusions, contamination jumbles the order of things. As forms of entropy, contamination produces composite effects derived from a source without origins. Contamination analysis proceeds along a unidirectional temporal axis. Before and after, cause and effect. A theological purity is assumed in which redemption recuperates the poisoned body and soul. Contamination might also be a *pharmakon*, both a poison and a cure. Contamination is a form of technics, open to new futures.

DECAY

Decay marks the inevitable dissolution of form and structure. As a process of gradual disintegration, decay reveals the temporal nature of all material existence, making visible the invisible work of time. It operates as both destroyer and transformer—breaking down complex structures into foundational elements while generating new forms of life and matter. In decay, boundaries between life and death become porous. Death feeds the living. Like a slow-motion choreography, decay orchestrates the return of organized matter to an often indiscernible form. A generative potential subsists in this breakdown of complexity. Decay challenges human desires for permanence and preservation, forcing a confrontation with mortality and impermanence. In cultural terms, decay signifies both loss and nostalgia, creating aesthetic possibilities through ruins and fragments. It is a process that cannot fully be controlled or prevented, only delayed. Decay thus serves as both material reality and metaphor, revealing how all systems—biological, social, cultural—are subject to transformation through deterioration. As a mode of production, decay is not merely an ending but a necessary phase in cycles of renewal and regeneration.

DISTURBANCE

Disturbance ruptures the illusion of stability, revealing the precarity of order. As an interruption of routine tendencies and codified patterns, it exposes the underlying fragility of systems while creating openings for new arrangements. Disturbance acts as both destroyer and catalyst—unsettling established rhythms while triggering adaptive responses and evolutionary possibilities. Like ripples in stagnant water, it propagates through dispersion, creating cascading effects that transform entire systems. It challenges the myth of equilibrium, showing that change and disruption are fundamental to all living systems. In ecological terms, disturbance maintains diversity and drives adaptation; in social terms, disturbances spark revolution and reformation, uprising and rebellion. Disturbance exists at the threshold between chaos and order, precipitating renewal and reorganization. Far from merely destructive, disturbances are generative, creating spaces for emergence and innovation. As a conceptual tool, disturbances register how systems respond to shock, adapt to change, and recompose amidst crisis. Indeed, stability is a temporary state conditioned by its counterpart, disturbance. The disruption occasioned by disturbance is not an anomaly but a vital component of dynamic systems.

DRIFT

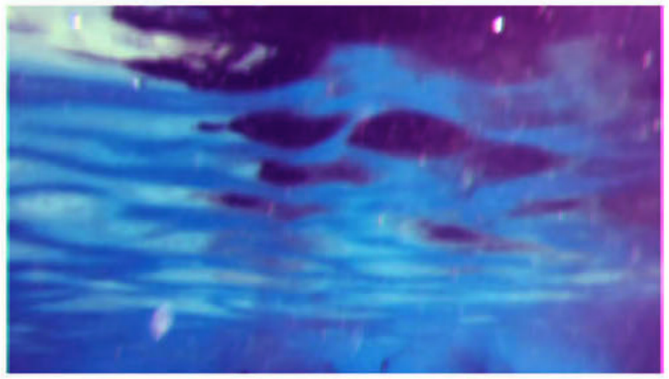
Drift is the slow, often imperceptible movement away from a fixed point. Sand erodes, ice recedes, celestial configurations reconfigure, aligned in syzygies. Drift is not a deliberate action but an unfolding indifferent to consequences or outcomes. Things shift over time, carried by currents—whether physical, emotional, or conceptual. Drift occurs when things are no longer anchored, when movement is the default rather than intention. Drift manifests as a subtle power of propulsion not surrendered to control. Drift works through the passages of time in ways that evade containment. Drift registers a gradual change of perspective, where ideas meander and recompose without overt decision. Drift can be disorienting. It unsettles as form discombobulates. The clarity of purpose gives way to uncertainty without direction. But drift is also a reminder of how little is retained, how every moment carries with it the potential to slip into something else, leaving behind traces of what once was. Drift delivers no guarantees, but it also spawns the possibility of freedom.

ENTROPY

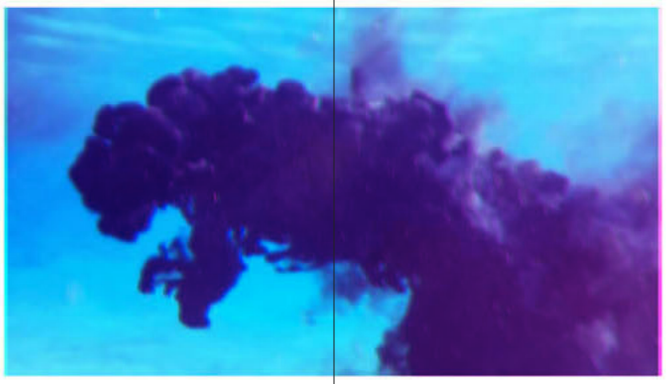
Entropy conditions the cybernetic century. The entropy of environment organizes relations in ways that radically flip the logistical episteme. Entropy is a condition of possibility when set against the limits of the integrating logic of machines. Entropy interjects and unravels ledgers of transaction. The economic fantasies of accelerated abundance that fuel the speculative delirium of the tech and finance sectors, trickling down in delayed fashion to government organizations and educational institutions, register the surrender of reason—of order—to the constitutive dynamic of entropy. Not just energy, entropy highlights the question of power, its distribution and impact on informational measures of value, cognition, labour, and modes of organization. Media staple environment to logistics as technologies that mediate the dynamic between contingency and entropy. Contingency interrupts plans. Entropy introduces disorder. Media organize disruption and disorder as constitutive elements in the production of value enabled by technologies of capture and control. Entropy is always on the heels of control.

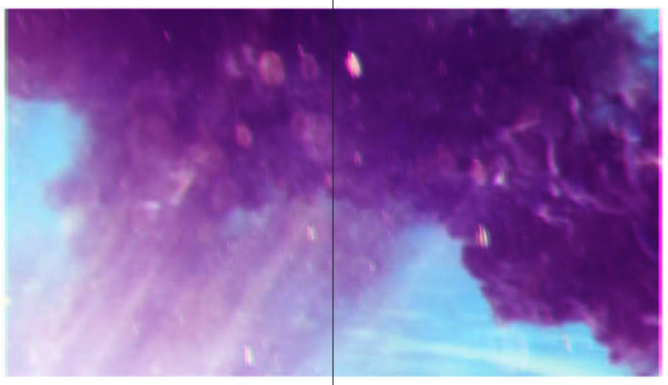
FLUX

Flux is the condition of becoming. It resists the burden of form and favours transition. To be in flux is to inhabit a threshold — neither arrival nor departure, but a continual unfolding. Flux is not chaos, though it may radiate the sensation of uncertainty. Flux has rhythm, but no repetition. Rivers, clouds, or minds in mid-thought are in flux. Identity is provisional. That which was fixed now bends, shifts, dissolves. It is the undoing of certainty, the soft erosion of edge and form. Flux does not ask permission — it moves through systems and subjects, undoing chains that bind. It is both loss and possibility. To enter flux is to surrender to motion, to the blur between what was and what might be. And yet, there is clarity in this movement — a fidelity with experience that only appears when things are no longer still.








FUSION

Fusion transgresses the boundaries of distinct elements, creating new forms that exceed their primary composition. As a process of interpenetration and invention, fusion catalyses hybrid possibilities that challenge schematic categories and fixed identities. Fusion operates across multiple scales and dimensions—from nuclear fusion in stars that forge heavier elements, to cultural fusion that births new aesthetic expressions and social formations. Unlike mere mixture or addition, fusion produces transformative effects that fundamentally alter the organization of combination. Fusion recombines as an alchemical process where the whole becomes more than its parts. In fusion, opposites don't just meet; they dissolve into each other, creating novel configurations. Fusion defies binary logic, suggesting instead a fluid continuum of potential combinations. Fusion powers cosmic creation and cultural renewal, serving as both a physical process and a conceptual model for transformation. It represents a generative force that moves beyond simple synthesis toward radical recasting. As a mode of thinking, fusion embraces contamination and impurity as sources of creativity. Fusion suggests that the future emerges not from purity but from productive collision and recombination, making it a paradigm for understanding change.

HARVEST

Harvest marks the culmination of an agriculture cycle. A season ends, another begins. Harvests are central to agrarian economies. A strong yield delivers economic dividends. Insufficient harvests precipitate social insecurities, economic crises, civil disturbances, violence even. Harvests are social events marked by festivities to celebrate a limited horizon of futurity. Year in, year out. As cultural moments harvests symbolize life and the reiteration of society replenished and regenerated. Harvest festivals are often appropriated by religions, subverting their strictures though logics of inclusion. *Bihu* in Assamese, *Sankranti* in Bengali, *Pongal* in Tamil, *Gawai Dayak* in the Sarawak area of Malaysia, *Songkran* in Thailand, and *Pahiyas* in Lucban, Philippines are some of the words indicating harvest and associated festivals.

INDICATOR

An indicator gauges the presence, condition, or degree of a particular phenomenon. Indicators measure the health, trend, or status of a system. Much like a compass or a guide, an indicator points toward specific outcomes or changes, guiding decisions or actions. While an indicator alone may not explain the full complexity of a subject or thing, it registers a simplified, quantifiable data point of broader contexts. Indicators are often used in decision-making processes, providing clarity and direction. However, they also require careful interpretation. Just as a compass can mislead without understanding the terrain, indicators must be understood as just one mark of a broader context to avoid erroneous conclusions. They also serve as signposts that help orient people through the complexities of the world, offering useful information for those who follow instructions.

INVASION

Invasion ruptures the security of defence lines. It arrives with urgency, and is not always audible. A silence can invade as deeply as a siren. To be invaded is to be made aware of one's own borders, their fragility and provisional status. The invader claims space, but also defines it, reshaping what was once whole into a terrain of conflict and revision. Invasion is not only the work of armies or empires. A thought can invade a belief system or cosmology. Memory floods a present moment. A stranger's gaze unsettles a room. Invasion is both event and atmosphere. Invaded sites do not disappear—they endure, transformed, bruised, alert. Invasion never moves in a unilinear direction. It awakens dormant bodies and brains, states and cells. Something must open—willingly or not. And afterward, even in retreat, the invader leaves traces: changed names, altered maps, new thresholds drawn in dust.

KINETIC

Kinetics is motion made tangible, the expression of energy in action. Kinetic forces are not a single point of origin of movement. As an ongoing, fluid force kinetics animate objects, thoughts, and systems. Kinetics exist where things are in process—not fixed, but ever shifting, ever becoming. In physics, it is the energy of motion, measurable and predictable, but adopts a subtler hue in life. Kinetic power is indexed in the sway of a tree in wind, the ripple of water disturbed by a stone, the flow of ideas that shape change. It reveals that stillness is not the absence of movement, but its opposite—a momentary pause before the next shift. To be kinetic is to be in transition, never at rest, constantly interacting with forces that push and pull. Even in the smallest acts—a glance, a gesture—there is kinetic energy, a potential that propels outward, touching everything it encounters. In the end, kinetics is not just movement, but the force that binds all things in motion.

MICROCOSM

A microcosm is a world in miniature, a particle within a larger whole. It is not a replica, but a distillation—capturing essence, complexity, and order within a smaller frame. In a single drop of water, there is an ecosystem; in a small room, a universe of relationships. A microcosm holds within it the dynamics of the macrocosm, yet it is not bound by scale. It is both a mirror and a possibility—showing what is, while hinting at what could be. The microcosm is not fixed; it shifts with perception, with context. One person's mind, a city block, a single cell—each can be a microcosm. It is a reminder that even the smallest thing can carry the weight of the larger world. To understand a microcosm is to glimpse the interconnectedness of all things—how each part reflects, refracts, and shapes the whole.

MITIGATION

Mitigation operates as a strategic intervention against harm, working to reduce rather than eliminate adverse effects. As a form of damage control, it acknowledges the impossibility of perfect prevention while creating pathways to minimize impact. Mitigation exists in the space between acceptance and resistance, recognizing that while some changes are inevitable, their severity can be modulated. Like a shock absorber, it doesn't prevent what is often negative or destructive impact but transforms its intensity and distribution. In environmental terms, mitigation strategies address destruction wrought by climate change; in risk management, they reduce potential losses. Mitigation embodies a pragmatic approach to dealing with threats, suggesting that partial solutions have value even when complete solutions remain elusive. It challenges binary thinking about success and failure, proposing instead a spectrum of possible outcomes. As a conceptual framework, mitigation helps us understand how systems can adapt to and survive pressures that cannot be fully avoided. It represents a middle path between passive acceptance and impossible prevention, making it both a practical tool and a philosophical stance toward managing change.

MONSOON

Monsoons are periodic oscillators. Involving the arrival and retreat of seasonal winds, sweeping moisture from the ocean to the land, igniting cycles of replenishment, regeneration, and change. Dried riverbeds are drenched with water. Dusty foliage shimmers with emerald. Parched soil turns moist, seeds bloom, grasses grow, and insects are born. Monsoon rewrites landscape.
With the land heating, air masses swirling, monsoon winds pivoting, and rain pounding across the year in variable climatic systems and geographic regions, monsoons intermediate the transition from intense and often overwhelming heat to cooler conditions. Monsoon drapes much of Asia in a pulsing rhythm of anticipation, arrival, and retreat—an ancient, planetary exhalation that shapes landscapes, lives, and lore. Culturally, the monsoon saturates everything—poetry, music, festivals, the language of longing and return. Its arrival is celebrated and waited for with anticipation, woven into rituals and prayers, its unpredictability mirrored in songs and stories. Monsoons regenerate and destroy. Invoking longing, hope, and fear, monsoons deliver abundance. Monsoons bring not just the cascading of rain but the coexistence of necessity, excess, and vulnerability revealing the intricate, interconnected nature of living systems.

NOISE

Noise is sound without order, a disruption that unsettles acoustic routines. It is an unwanted, often intrusive and chaotic element that apprehends spaces we seek to control. Yet, noise is not without meaning; it intrudes upon thresholds of the given, a registration of imbalance, of disturbance. Noise can index change—wind rustling leaves, thunder splitting the air, the crackle of fire—but in human spaces, it often signals excess, something out of place, an interruption to focus, to clarity. Noise is not only audible. In thought, it manifests as distraction, as static in our minds, as fragmented ideas that resist the contours of coherence. In society, it is the barrage of messages, the bombardment of information that drowns out the essential. Noise both conceals and exposes, creating boundaries between what is heard and what remains unsaid. It may overwhelm, but it also invites attention to the unvoiced, to what lies beneath the surface of clarity.


防音
SOUND
BARRIER

PARAMETER

Parameters define the boundaries of possibility while revealing their own contingency. As frameworks for measurement and control, they establish conditions within which systems operate, yet remain artificial constructs subject to adjustment. They function as both constraints and enablers — limiting what's possible while creating structured spaces of emergence. Parameters operate across scales, from mathematical equations to social norms, setting rules that govern behaviour and interaction. Like invisible architectures, they shape outcomes while often remaining unexamined. Parameters are never neutral; they embed assumptions, power relations, and historical contingencies. In computational terms, they determine algorithmic behaviour; in social terms, they define limits of acceptable action. Yet parameters are also sites of intervention, where small adjustments can produce dramatic systemic effects. They represent the dialectic between constraint and freedom, structure and agency, making them both instruments of control and potential sites of liberation.

SYMBIOSIS

Symbiosis is a relationship — one predicated on interdependence. It is the intertwining of lives, where each entity contributes to the survival of the other. This connection can be mutual, where both benefit, or one-sided, where one thrives while the other supplies the means to reproduction. In nature, symbiosis is often essential, not just advantageous. It reveals a truth: survival is rarely an individual endeavour. From the smallest microbes in the soil to the vast networks of plant and animal life, symbiosis defines how life sustains itself through cooperation and exchange. But symbiosis is not always harmonious. It can be a fragile balance, where one shift in conditions can disrupt the entire relationship. Symbiosis assumes a question of limits, of boundaries — what is shared, what is taken, and what is given? Symbiosis is both a necessity and a negotiation, where life flourishes not in isolation but in connection.

RESIDUE

Residue remains. Lingering fragments, faint imprints of that which was once present, remnants of a moment passed. Components gestate after a reaction or process, clues of a discarded world, residues manifest ideas, memories, experiences, and possible futures as indexical forms. As a value carried over from a division or an operation, residue hints at previous structures of ways of life as a whole. Persisting beyond the surface, residues are the sentient remnants of the forgotten. Traversing borders and refuting exits, signalling endurance and intersecting temporalities, residue is neither visible nor invisible but rather an insistence on disjunctive conjunctions of the contemporary.

SPECIES

Species is a classification—a way of grouping life based on shared traits and characteristics. It defines a boundary, a way to say, “this is what this life form is.” Yet, species are never static. They shift, adapt, and evolve over time. What we consider as a species today may not remain the same tomorrow, as change flows through genetics, environment, and interaction. Taxonomy attempts to bring order, but the lines between species are often more blurred than clear. Hybridization, mutation, and evolution complicate this simple separation. A species is both a snapshot in time and a process—one that adapts, survives, and sometimes fades away. To understand a species is to understand its relationship with everything around it, not just what it is, but what it might become. A species is not a fixed identity, but a continuous becoming.

TRANSLATION

Not just conversation, translation is a productive process of transformation. An act of transference, translation binds different systems of meaning. Perfect equivalence is impossible. Translation is always an act of negotiation, operating in the latent space of the interval where meaning is recast. Languages, cultures, and ways of knowing are up for grabs. Translation reverberates, defamiliarizing revolution from here and there. Techniques of reorientation unsettle meaning. Translation serves as both practice and metaphor for all acts of cultural exchange and transformation. Violating the sanctity of origins, translation deviates intentions and perverts directives. As a generative force, translation crosses boundaries and invades territories, reordering the world. Translation enlists the paradox of difference and conformity, dispute and appeasement, freedom and control. Replication is always undermined and contorted. Translation retires the realm of the given.


DANGER–KEEP OUT!
危險，請避開！
அபாயம்–அருகில் வராதீர்கள்!
BAHAYA–JANGAN DEKAT!

TRIBUTARIES

Tributaries bind space as territory. Tributaries are dilution systems, mixing water, unsettling sediments, and releasing microscopic organisms into expanding and contracting estuarine horizons. Tributaries are also metaphors of convergence. They blur boundaries, carry memory, and surrender identity to become part of something cumulative. They remind us that origins matter less than what we join, that identity is shaped in transit. Tributaries evoke a collective journey—intertwining paths, layered histories, quiet contributions. Empire is preconditioned by tributary systems. Primitive accumulation is preceded and made possible by tributaries. Connecting sites of trade, tributaries orient the movement of exchange and redistribution of production across capillaries of power. A Sino-centric world order is in the midst of formation, animating a multipolar world order of regional infrastructural politics bolted to neo-tributary systems.

VARIABLE

X and Y are variables. Capital is variegated. Patterns are not fixed. Spectrum analysis has a plastic propensity, stretching parameters into calculable zones of liminality. Refusing to occupy a position, variables present as depoliticized techniques. Yet their logic of measure will always determine a point demarcation.
A variable assumes the status of an axiom, yet it takes flight when confronted with the final decision. “The center will not hold” (Yeats/Didion). Variables imply options. This or that, maybe but I don’t think so. “I would prefer not to” (Bartleby). The evasive dance is the gesture of the variable. Yet all variables are not equal. How to discern the power of one variable over another? Variables depend on parameters and are yet flexible. Variables suggest that stability and change are not always in opposition but can be complementary in a dynamic system. A variable is never neutral; its presence disrupts the status quo, creating possibilities within a fixed structure.

VECTOR

A vector is a quantity characterized by both magnitude and direction, making it a crucial concept across a variety of disciplines. Vectors describe forces, velocities, accelerations, and other directional phenomena to understand how objects move and interact within set coordinates. Vectors also denote points or directions in multi-dimensional spaces. A vector can represent multiple factors influencing decisions or outcomes. Vectors are also used metaphorically to outline trends or movements, such as the direction and intensity of cultural, political, or social dynamics. They also refer to organisms that transmit pathogens in a specific direction to a host. Vectors often transcend their mathematical origins, offering a unifying tool for understanding diverse systems where both magnitude and direction play crucial roles in shaping outcomes and behaviours.

GEOPOLITICS

Algorithmic Bias
Bio-Algorithmic Governance
Chip War
Commons
Digital Autarky
Digital Authoritarianism
Digital Labour Rights
Digital Nomadism
Digital Slavery
Digital *Tianxia*
Disinformation
Gig Work
Gig Worker Solidarity
Ghost Work
Grid Governance 網格化管理
Hybrid Warfare
Offshore Shadow Economy System
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GEOPOLITICS

Geopolitics concerns the ways in which geography shapes political power—how the control of territory, resources, and strategic locations influences the behaviour of states and the configuration of global orders. At its core lies the interrelation between space, power, and governance, revealing how spatial organization and technological mediation structure political authority.

Our inquiry focuses on a cluster of concepts that redefine geopolitics in the age of digital technology. We attend to the semiconductor—the tiny chip that powers everything from smartphones to missiles—as the infrastructural heart of the digital era. This minute object has triggered the ongoing *chip war* between China and the United States, enabled the development of artificial intelligence, fuelled the expansion of smart-city networks along the *Digital Silk Road*, and provoked new forms of cyber warfare and mass disinformation. Together, these processes signal the emergence of a new geopolitical terrain, where power operates through circuits, data, and infrastructure rather than territory alone.

To understand this transformation, we introduce several key concepts that illuminate key modes of governmentality in the digital age:

digital authoritarianism, *bio-algorithmic governance*, *social credit systems*, *grid governance*, *algorithmic bias*, and the *surveillance regime*. Each describes how digital technologies reorganize the exercise of power and cultivation of obedience. At the same time, the mode of production and its social formations have undergone radical change. Phenomena such as *gig work*, *ghost work*, *digital nomadism*, *digital slavery*, *piracy*, *scam empires*, and *offshore shadow economies* point to the reconfiguration of labour, value, and exploitation under digital capitalism. Yet within these precarious conditions, we also observe the emergence of new solidarities: *digital commons*, *movements for platform labour rights*, and *gig-worker alliances* that challenge algorithmic domination and reclaim collective agency. Taken as a constellation of concepts, this section of the book maps the shifting frontiers of geopolitics in a world where power is exercised not merely through land and resources but through data, code, and planetary infrastructures.

ALGORITHMIC BIAS

Algorithmic bias highlights how for different populations or groups of people are subject to punitive decisions as a result of data correlation, existing inequalities, or assumptions built into the code. In digital labour platforms, algorithmic bias shows up as unfair job assignments, harsh penalties, or less job availability exposure for some workers based on their gender, location, income level, or behaviour. In addition to the disadvantages of slower connectivity, limited language, or caregiving responsibilities, gig workers may be penalized by algorithms that favour urban density, quick response, or positive customer reviews. Workers have little to no recourse to challenge these forms of bias, which are rarely disclosed. Employees have few, if any, options to challenge or contest such governmental regimes. Algorithmic bias reinforces existing forms of marginalization while presenting itself as objective and neutral. Normative beliefs and values from wealthy countries are often reproduced in very different cultures, infusing digital colonialism into daily experiences.

The algorithmic distribution of jobs based on social, economic, gender, and racial characteristics exacerbates existing inequalities. In Vietnam, ride-hailing and delivery workers operating in peri-urban or rural areas report receiving significantly fewer orders than those in central business districts, as platform algorithms prioritize workers located in high-demand urban zones. Similarly, female workers with caregiving responsibilities often struggle to meet rapid response-time expectations imposed by platform apps, resulting in lower ratings and reduced job visibility. In some cases, workers have had their accounts suspended without explanation, lacking access to any clear mechanism for appeal. These cases reflect how algorithmic decisions penalize workers for factors beyond their control.

BIO-ALGORITHMIC GOVERNANCE

Foucault's concept of biopolitics — the governance of populations through the regulation of life processes — offers a critical lens for understanding how digital technologies intensify modern forms of control. Traditionally, biopolitics managed health, reproduction, and mortality to align with state or economic objectives, primarily through surveillance and normalization. In the digital era, governance techniques have expanded through datafication — the conversion of everyday behaviours, identities, and bodies into data. Digital infrastructures such as biometric IDs, algorithmic scoring systems, and predictive analytics deepen biopolitical control by enabling granular monitoring and anticipatory intervention. Systems like China's Social Credit System, India's Aadhaar, and Singapore's Singpass exemplify how states and corporations authenticate, assess, and regulate individuals through digital means. While these systems promise efficiency and security, they often reduce people to data points and embed them within opaque and exclusionary classifications.

The most disturbing example is the "Uyghur alarm" implemented by the Chinese government. This system fuses biometric surveillance with algorithmic control to regulate populations deemed "risky." Biometrics of Uyghurs are collected and integrated into a surveillance network, rendered algorithmically detectable through real-time facial recognition software that triggers alerts when Uyghurs appear in areas deemed sensitive. Under the pretext of security and social stability, algorithmic identification based on biological markers of ethnicity transforms racialized identity into a data signal for coercive intervention. Bio-algorithmics extends to digital citizenship in which civic, economic, and social participation is mediated by access to and control over digital identities. While digital tools may facilitate inclusion and access, they also reinforce inequality through algorithmic bias, surveillance, and uneven distribution of technological infrastructure. Predictive technologies in healthcare, policing, and finance can pre-emptively constrain behaviors and opportunities based on speculative risk profiles. Digital citizenship thus embodies a paradox: it expands the infrastructure of rights and services while embedding individuals more deeply within technocratic systems of governance.

CHIP WAR

In the midst of the Cold War, geopolitics oscillated in part around the space race. Today, it is a tech race. Beneath the surface of global trade and diplomacy, a not so quiet battle is unfolding, one where microscopic silicon chips have become the ultimate currency of power. No longer do wars concern military armaments alone such as guns or tanks, they are also about who controls the technological nervous system of the 21st century. The United States, long considered the undisputed tech innovator, faces an unprecedented challenge from China in what has become a defining struggle of our era: the chip war as the battle for tech hegemony.

Picture a high-stakes chess game where every move involves billion dollar factories, cutting-edge research labs, and government restrictions on technology exports. The US has stymied China's access to the latest advanced semiconductors. Entire industries hold their breath as Washington bans sales of advanced AI chips, while simultaneously luring chipmakers back to American soil with billions in subsidies. China does not sit passively on the sidelines, pouring substantial resources into homegrown alternatives and restricting exports of rare materials essential for chip production. The outcome will shape which nation sets the rules for the digital future, which companies thrive, and whose vision of technological society prevails. As the two superpowers dig in for a long confrontation, the rest of the world watches nervously. The chip war may lack the drama of traditional warfare, but its consequences will be just as profound for generations to come.

COMMONS

The commons refer to collectively managed resources whether material, such as land and water, or immaterial, such as knowledge and data. These resources are sustained through cooperative social relations that transcend state and private ownership. The commons are defined more by active social practices than by inherited assets and are maintained by communities bound by mutual obligations, shared responsibilities, and collective rights. Rooted etymologically in the Latin *munus*, meaning "duty" or "gift," the commons resist commodification and privatization. Instead, they prioritize democratic governance, participatory stewardship, and equitable redistribution. Generative AI systems like ChatGPT are built on humanity's shared data commons—vast reservoirs of intellectual and creative results. However, AI corporations are increasingly enclosing these commons through proprietary control and subscription-based models. Reclaiming these commons requires "commoning"—the collective reappropriation of data for public benefit rather than private profit. As AI firms profit from human-generated data, they have a responsibility to ensure social compensation and accountability.

In data capitalism, the concept of the commons extends beyond traditional natural resources to include intangible assets, such as data, algorithms, and digital infrastructures. This shift has fostered new models, such as platform cooperatives, which challenge the dominant paradigms of algorithmic control, labour commodification, and platform capitalism. In these models, technology is reconceptualized as a collectively owned and governed infrastructure that fosters solidarity and social justice. As a countervailing power to the power of enclosure, the commons offer a lens through which to rethink labour, automation, and platform work. By centring grassroots solidarity and shared governance, the concept enables transnational and interregional alliances among platform workers and data citizens. These alliances challenge the exploitative dynamics of an increasingly monopolized, platform-mediated capitalist world.

#data_commons #Solidarity #Association
#Platform_cooperativism

DIGITAL AUTARKY

Digital autarky extends the classical notion of autarky that is centred on economic self-sufficiency into the technological domain where states seek independence from foreign digital systems, platforms, and supply chains. It reflects a strategic drive to achieve national control over key technological infrastructures including data, software, hardware, and online platforms. The concept registers rising nationalism and security concerns in a digitized world, where major powers like the US, China, and India seek self-sufficiency while still vying for global influence. A prominent case is China's "Red Supply Chain" initiative, which promotes domestic self-reliance in sectors such as semiconductors, electronics, and telecommunications. Backed by substantial state subsidies, industrial policies, and R&D investments, digital autarky aims to reduce dependency on foreign technologies and assert China's digital sovereignty.

However, the strategic desire of digital autarky is fraught with contradictions. While it claims to secure autonomy, digital autarky often reinforces domestic monopolies under state patronage, entrenching corporate concentration rather than democratizing innovation. It enables exploitative labour regimes across platform economies, where invisible, precarious work supports the façade of technological progress, as in the case of many of the Special Economic Zones of China's BRI programs. Environmental and social costs are frequently externalized, and critical debates on labour rights, sustainability, and distributive justice are sidelined. Rather than presenting an actually existing or potential alternative to Western tech dominance, digital autarky frequently replicates its extractive and exclusionary logic within a different geopolitical frame. Digital autarky must be understood not merely as a development strategy, but as an ideological project — one that privileges techno-nationalist ambitions over equitable, inclusive digital futures.

DIGITAL AUTHORITARIANISM

Digital authoritarianism is a mode of governance in which states deploy digital technologies to surveil, repress, and manipulate populations, both domestically and abroad, with the aim of consolidating authoritarian control. Rooted in broader authoritarian practices such as centralized power, restricted civil liberties, and the suppression of dissent, this 21st century phenomenon represents the fusion of technological innovation with coercive state power. Key features include mass surveillance through AI, facial recognition, and GPS tracking; online censorship via firewalls, keyword filtering, and website blacklisting; disinformation campaigns that manipulate public opinion and discredit opposition; and strategic internet shutdowns during periods of political unrest. States also use bots, algorithms, and targeted propaganda to shape behaviour and stifle collective mobilization.

While forms of digital authoritarianism may also emerge within liberal democracies, they are most systematically institutionalized in autocratic regimes such as China, Russia, and Myanmar. China's "Great Firewall," Russia's SORM surveillance architecture, and Myanmar's post-coup digital repression illustrate how states increasingly mobilize technological infrastructures to discipline populations, regulate information flows, and reshape the conditions of political visibility. In these contexts, digital systems function not merely as tools of governance but as infrastructures of power, enabling regimes to penetrate everyday communication, monitor dissent, and reconfigure public space.

Digital authoritarianism thus poses a profound global challenge to privacy, freedom of expression, and political participation. Far from realizing early promises of technological emancipation, contemporary digital infrastructures can be weaponized to consolidate sovereign power, normalize surveillance, and erode the normative foundations of open governance.

DIGITAL LABOUR RIGHTS

In the digital age, digital labour rights are a branch of human rights, which aims to ensure that workers participating in the digital economy, including platform work, freelance work, and digital intermediary work, are fully protected in terms of working rights and conditions. These rights include the right to personal data protection, transparent information about contracts and management algorithms, collective bargaining, access social security, and complaint or protest decisions made by automated systems. Currently, some regions of the world have begun to pay attention to digital labour rights. For example, the European Union is developing *The Platform Work Directive*, which aims to combat the shaming of "freelance workers" in order to evade the responsibility to protect workers, and to force platforms to be transparent about algorithms and working conditions. In Spain, Riders' Law has recognized delivery drivers as full-time workers, with social security rights and trade union representatives.
In contrast, many countries in the Global South such as Vietnam, Indonesia, or Kenya, the issue of digital labour rights has not been set as a policy priority. In Vietnam, thousands of tech drivers work without formal contracts, do not pay social insurance, and are vulnerable to account lockouts due to decisions from the app's automated system without a clear response mechanism. There is an asymmetry between the Global North and the Global South when it comes to identifying and protecting digital labour rights, increasing vulnerability and inequality in the globalized workforce.

DIGITAL NOMADISM

Digital nomadism refers to the transient lifestyle of individuals who work remotely and frequently travel across borders. This activity has especially flourished after the COVID-19 pandemic. Through digital technology and flexible work arrangements, many people became digital nomads with the relative ease of travel, affordable prices, improved internet infrastructure, the attraction of living in exotic locales, balancing life and work. The MBO Partners 2024 State of Independence noted that there are 18.1 million Americans who are digital nomads, a number that has increased by more than 14% since 2019. Digital nomads are all remote workers, but not all remote workers are nomads because these people both work and travel for employment, unlike remote workers who may only need to be in one location. In practice, however, digital nomadism hides geopolitical inequalities. Nomads in the Global North often enjoy visa privileges and currency disparity, while those in the Global South may experience rising living costs, digital gentrification, and labour market disruptions when on the move. This uneven exchange exposes the asymmetric power dynamics embedded in the global digital economy, reproducing colonial patterns of spatial divisions of labour. Issues around digital rights, tax regulation, and socio-spatial justice are increasingly pressing.

DIGITAL SLAVERY

The term refers to the labour condition associated with extraction of minerals like tin, tantalum, cobalt, gallium, platinum, tungsten, lithium, silicon, and rare earth minerals required for producing smartphones, computers, rechargeable batteries, solar and electrical gadgets. In several African countries, particularly the Democratic Republic of Congo (the country supplying most of the global demand for cobalt), poor artisanal miners including child workers face slave-like conditions digging out rocks from deep underground tunnels without basic protective equipment, precarious wages, lack of social security, exposure to conflict zones, frequent accidents, death, and fatal health hazards due to prolonged exposure to minerals. Amnesty International's 2016 report *"This is what we die for": Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt* (2016) is a major account of mining of "blood minerals" and "conflict minerals," detailing the violence in illegal and conflict-prone mining that makes possible the digital gadgets we use. According to a 2003 UN report, smuggling and exportation of coltan (the industrial name for the mineral from which tantalum is extracted), has helped fuel a war in Congo resulting in approximately 5.4 million deaths since 1998. Digital slavery, in addition to acute compromise of corporate and governmental ethics and human rights, involves severe threat to environment and wildlife. African countries are among the largest producers of minerals needed for ICTs, a cheap (due to highly exploited labour) source of natural resources that are imported, processed, exported, and sold by non-African countries, especially China. China's increasing control over African and other sites of digital mineral extraction is right at the heart of extractive capitalism and geopolitics tied to the global supply chain of digital products.

DIGITAL *TIANXIA*

Digital *Tianxia* integrates the Chinese concept of *Tianxia* 天下 — "All-Under-Heaven" — into a global, networked realm. Historically, *Tianxia* was an imperial vision of universal harmony, one where emperors seen as the "Son of Heaven" ruled with a mandate grounded in moral superiority. Here we find an all-encompassing world order governed by moral authority and the principle of "no outside." *Tianxia* functioned as a logic of domination, enforced through military power, forced assimilation, and centralized control. Zhao Tingyang's "New Tianxia System" captures the aspiration of *Tianxia* as the architect of a hierarchical yet interdependent global order. China's Belt and Road Initiative (BRI), launched in 2013 by Xi Jinping, has materialized this *Tianxia* vision as a sweeping geopolitical and economic project that reconfigures global trade corridors while addressing China's domestic overcapacity. Through major routes like the China-Pakistan Economic Corridor and the New Eurasian Land Bridge, it secures maritime chokepoints, builds military-logistical hubs, and deepens ties with Eurasian partners.

The Digital Silk Road (DSR) further extends a regime of infrastructural sovereignty through networks — fibre-optic cables, data centres, 5G, and surveillance systems — under what some envision as a "World Digital Brain." This new political form operates via infrastructure, data flows, and surveillance systems. Surveillance technologies from companies like Huawei and Hikvision comprise a significant part of the world's surveillance infrastructure. Domestically and internationally, these technologies enable pervasive state control, evident in systems like Skynet and Sharp Eyes in China and "Safe City" projects in over eighty countries. At its core, Digital *Tianxia* is driven by a desire to dominate and stabilize through computational control. The regime enforces obedience, silences dissent, and governs through digital infrastructure, algorithmic sorting, and data harvesting. Digital *Tianxia* highlights global control structures available for emulation. The allure of an "all-inclusive empire," veiled as progress, remains a potent fantasy for any aspiring hegemon.

DISINFORMATION

With computational advances, disinformation nowadays propagates on a massive scale and at high speed, making it a powerful tool for an increasing number of governments. Disinformation is inaccurate, false, or misleading information created and disseminated using digital technologies with the intention to deceive. Disinformation campaigns can be highly effective, amplifying our sense of a post-truth world that includes domestic rivals and international adversaries alike. They are utilized to spread hate speech against certain groups like immigrants, drive division within and between societies, distract the public from key issues, manipulate elections, and apply pressures to governments. Disinformation utilizes various tactics, including social media bots, keyboard armies, and astroturfing.

At the height of the COVID-19 pandemic, the US military launched a secret campaign to undermine what it viewed as China's growing influence in the Philippines, propagating false information about vaccines supplied by China. The campaign continued for around a year and spread to other countries in Central and West Asia. Funnily enough, sometimes targets of disinformation are themselves propagators of disinformation in other areas. The "50 Cent Army" (五毛), for instance, refers a network of individuals in China who post pro-government content on social media. The name comes from reports that participants were once paid ¥0.50 per post, though actual compensation varies. These commentators aim to shape online discourse by promoting state-approved narratives and diverting attention from sensitive topics. While estimates suggest millions of posts are generated annually, the scale and organization of these efforts remain debated.

GIG WORK

Introduced in the 1920s, the term “gig” has origins in Black music and jazz cultures to describe a temporary engagement. By extension, gig work is understood as flexible and autonomous, task-based work performed by individuals. Gig workers may be contracted for jobs but are not considered formal employees with salaries, insurance, and other benefits. In the Global South, freelance work is quite popular; however, social and legal protections for these workers are fragile, making this group of workers precarious and heavily dependent on the distribution of work based on algorithmic control. While we might assume that gig work can bring many opportunities for workers, allowing them to access employment regardless of borders, in reality this type of work also contains political grievances, such as shifting labour responsibility from employers and the state onto individuals, deepening the precarity of labour and life.

South Korea’s Chongal (총알; bullet speed) delivery exemplifies the extreme end of platform labour, where drivers face gruelling hours, algorithmic surveillance, and exploitative conditions. Similar dynamics are evident in China’s Eleme and Meituan. In Vietnam, platforms like Grab, ShopeeFood, and AhaMove have expanded gig work rapidly, reproducing income instability and heightened risks. Across East Asia, gig work reveals a regional political economy of precarity, intertwining speed, surveillance, and labour exploitation beneath the promise of digital convenience. Workers deal with an absence of insurance, high exposure to traffic accidents, and tight platform controls through apps and rating systems. The emphasis on ultra-fast delivery in urban centres reproduces patterns of labour commodification and social insecurity.

GIG WORKER SOLIDARITY

Tactical politics and actions are deployed when gig workers engage in various forms of individual or collective resistance against the brutality of platform capitalism. There are now many studies that evidence how workers have been lured into gig work, especially during the onset of COVID-19, but also been subjected to increased labour insecurity as a result of algorithmic management and assessment. Migrant and minority workers, who are often made invisible in mainstream employment, have been woven in the infrastructure of platform capitalism, rendering them as part of the precariat. On the other hand, workers around the world have adopted variegated means to resist platform business malpractices or everyday work-related aggression, individually or collectively. In particular, they engage in various forms of solidarity, including organized social protests and unionization, and make use of social media platforms to voice grievances against platform exploitation, mobilizing support from fellow workers and the public. Studies of gig workers will often investigate the dynamics and politics associated with inter- and intra-ethnic worker solidarity arising from the organization of workers. The spatiality of minority groups may include subversion of online discourses and physical spaces, which can be converted them into “places” of solidarity and conviviality. Tactics and practices of discursive resistance help reclaim workers’ subjectivity by making “visible” the plight of migrant workers, subverting mainstream media tendencies. Gig worker solidarity also speaks to the challenges, contradictions, and politics in terms of encroaching censorship from social media platforms, as well as digital and offline surveillance by employers as well as the government.

GHOST WORK

Ghost work, a term coined by media scholar Mary L. Gray, refers to the hidden, precarious labour that supports the automation of artificial intelligence (AI) systems and digital platforms. The illusion of self-operating algorithms is maintained by a global underclass of human workers who perform essential yet invisible tasks, such as data annotation, content moderation, and identity verification. Often based in Asia and other low-wage regions, these workers are anonymized through user IDs, easily replaceable, and systematically excluded from public recognition. Platforms are increasingly restructuring labour markets by embedding gig and ghost work models that circumvent formal employment protections. In Asia, where legal and regulatory frameworks are often underdeveloped, platform companies exploit these gaps to increase precarity and strengthen their infrastructural dominance. The expansion of these models reorganizes labour and commodifies social life by embedding the logic of platforms into everyday practices.

While technology firms highlight engineers and proprietary algorithms, the manual labour that sustains these systems is deliberately hidden. Ghost work challenges the myth that AI reduces human labour, revealing instead that it displaces secure jobs and extends exploitative, algorithmically managed labour regimes. This work is fragmented, unstable, and governed by opaque rules, offering little bargaining power or visibility. As a structural pillar of platform capitalism, ghost work reveals the human labour hidden beneath the surface of so-called “smart” technologies. Ghost work demands critical attention to the politics of concealment in automation. Dominant narratives of innovation, efficiency, and progress in the digital age are called into question.

#Informal_Labour #gig_work #Mechanical_Turk

GRID GOVERNANCE 網格化管理

Grid governance (網格化管理) in China is a contemporary model of localized surveillance and social management rooted in the historical *bao-jia* system (保甲制度), which organized households into mutual accountability units for collective monitoring. Today, this logic is revived through digital tools — facial recognition, real-time data platforms, and mobile apps — enabling continuous oversight of residents within spatially defined grids. Each unit is managed by local administrators, reinforcing pre-emptive control and community-based discipline. Crucially, this system incorporates *participatory surveillance*, where citizens actively contribute to monitoring by reporting behaviours or incidents through apps and hotlines. This bidirectional flow of information blurs the line between subject and agent of surveillance, echoing "citizen science" yet serving state objectives. Residents are obliged to participate as co-producers of control, tied to digital infrastructures that reward visibility and compliance, often quantified through social credit systems.

At the same time, grid governance exemplifies *liquid surveillance*, as described by Bauman and Lyon. Surveillance is no longer fixed or centralized but fluid, diffuse, and embedded in everyday digital life — spanning smart devices, social media, biometric systems, and consumer platforms. Individuals are reduced to data profiles or "digital doppelgängers," upon which access, trust, and opportunity increasingly depend. Under the guise of efficiency and public safety, China's "listening state" deploys pervasive surveillance technologies — from police-worn facial scanners to outdoor audio monitors — constructing a regime of algorithmic biopolitics.

HYBRID WARFARE

How are wars fought today? They are no longer characterized solely by conventional confrontations between regular armies. Instead, modern conflicts often involve a mix of military strategies and non-military tactics, blending conventional warfare with covert operations, cyberwarfare, economic warfare, and psychological manipulation. States may face non-state actors who employ guerrilla tactics, while adversaries exploit economic pressure, propaganda, and technological disruption to destabilize opponents without direct military engagement. In the 21st century, the lines between war and peace, soldier and civilian, and physical and digital battlefields become even more blurred. Unlike traditional warfare, hybrid strategies combine information warfare using mass propaganda and disinformation to sway election results in an adversarial country or destabilize governments by fomenting colour revolutions. Wars use cyber-attacks to target adversaries power grids and financial systems to cripple a nation without firing a shot.
A very common strategy of hybrid warfare is economic warfare or so called “sanctions,” which worsen the living standards for the population in a target country in the hope of catalyzing uprisings against the government. A key feature of hybrid warfare is its increasing reliance of AI and big data technologies, reducing human involvement on the battlefield. The deployment AI-driven drone swarms, autonomous weapons, and AI-generated assassination lists are the standout technologies of destruction.

OFFSHORE SHADOW ECONOMY SYSTEM

The Offshore Shadow Economy System refers to a decentralized, transnational network of legal, financial, and digital structures that operate at the margins of formal oversight. These systems are designed to conceal, move, and manage capital across borders for purposes ranging from tax avoidance and asset protection to more illicit activities such as money laundering and corruption. A key feature is the *Samoan style* of offshore company formation, which offers International Business Companies (IBCs), trusts, and other entities with minimal disclosure, low or zero taxation, and limited regulatory scrutiny. Often linked to financial hubs like Hong Kong or Singapore, these structures prioritize privacy and operate with relaxed accounting and reporting requirements.

Tax havens such as Samoa, the British Virgin Islands, and the Cayman Islands provide secrecy, low taxes, and favourable legal conditions, attracting both legitimate investors and those seeking to obscure illicit financial flows. These systems are increasingly integrated with digital infrastructure cryptocurrencies, online banking, and encrypted platforms—that enable anonymous, rapid, and borderless transactions. Transnational corporate networks, maintained by lawyers, accountants, and financial service providers, deploy webs of subsidiaries and shell companies to shift profits, avoid taxation, and shield assets. Many offshore systems also exploit Flag of Convenience (FOC) jurisdictions, where ships or businesses register under foreign flags to benefit from laxed regulation and oversight. By exploiting gaps between national laws—a process known as *regulatory arbitrage*—actors evade stricter financial controls, compliance standards, and anti-money laundering efforts. In essence, the Offshore Shadow Economy System forms a hidden layer of global capitalism. While it can support legitimate business functions, it is also a key mechanism for sustaining global financial opacity, draining public revenues, and enabling transnational economic crimes.

PIRACY

Piracy is the practice of copying, distribution, or use of copyrighted material without the permission of the copyright holder. With increasing access to copying technologies in the digital era, violation of Intellectual Property (IP) laws has now become easy and commonplace. Enforcement of copyright can be the responsibility of the copyright holder or the State may issue criminal penalties for copyright infringement. The United Nations agency that works towards enabling innovators to protect their IP is the World Intellectual Property Organization (WIPO), which currently includes 193 member states. Despite the efforts of states, corporates, and WIPO, piracy is rampant in the internet era when pirated digital objects do not need to move or cross the border physically, as was the case with printed books, cassettes, CDs, or DVDs.

Many believe IP laws create roadblocks to innovation, while piracy facilitates free proliferation of knowledge considered essential for equitable and democratic circulation of creative resources and freedom of innovation. Asia is often as cast as the site of what Ravi Sundaram calls “pirate modernity,” referring to an historical condition where media piracy produces a significant enabling resource for subaltern populations unable to enter legal frames of livelihood. This is how Asian societies often negotiate economic inequality, creatively encountering through informal means the challenges of modernization.
The sphere of education particularly benefits from piracy with widespread use of reading materials photocopied or downloaded from pirate repositories like Libgen and Sci-hub. Students and academics alike often obtain illegal access to audiovisual resources through apps like the Telegram or protocols like BitTorrent.
From hacking signals for illegal international livestreaming of sports to using VPN for watching government banned TikTok from India, piracy as a digital practice conjures a parallel geopolitics of access that questions institutions associated with global IP-enforcement.

PRECARITY

Precarity is a situation in which the worker's job is constantly in a state of insecurity, incapable of providing adequate material benefits or peace of mind. The social class defined by this condition is called precariat, bearing association of the proletariat. Precarity is frequently characterized by low and short-term job-based payment, unpaid labour, a contract (if any) highly favouring the employer's interests, lack of social security, no fixed working hours, and precarious working conditions including high risk workplaces. While precarity has existed in all spheres of work, the digital age has introduced new forms of precarity in professions like app-based fast delivery and cab service, freelance DTP (desktop publishing), and other digital services and gig-work of various kinds. Mining minerals for making computer chips and batteries particularly in parts of Africa is often cited as an example of an extremely precarious labour condition.

Studies in precarity explore how human lives are dehumanized by 21st century capitalism, particularly in marginal areas of neoliberal economies. From this perspective, the statist or capitalist enterprise of "development" is increasingly seen as embedded in structural, symbolic, and direct violence, where the worker is caught in an incessant web of suffering and desire. Anxiety, disenfranchisement, and loss of hope for the future in this context are not only seen as individual psychological conditions, but as having widespread social and political ramifications in maintaining the status quo. Research on precarity and the related categories of dispossession, unpaid labour, forced displacement, development, and unionization have often identified especially worse conditions of work among children, women, marginal sexual groups, refugees, and migrants within the precariat. A considerable part of studies in precarity in the digital sector carries the legacy of Italian Autonomist literature and broadly Marxian theorization and research on labour conditions and political economy.

SCAM EMPIRE

The darker undercurrents of China's Belt and Road Initiative (BRI) have erupted into view, exposing a shadow economy of scam compounds, human trafficking, and transnational crime. Echoing the illicit tributary trades of empire, the BRI's sprawling networks have birthed corridors of corruption, smuggling, forced labour, and tax evasion — anchored in the Special Economic Zones (SEZs) of Cambodia, Thailand, Myanmar, Laos, and the Philippines. Enabled by digital infrastructures and legal grey zones, these SEZs have become laboratories of human exploitation, entrapping around 25,000 victims in a machinery of online fraud and organ harvesting. A CNN report in 2024 estimates these operations generate up to $3 trillion annually, rivalling the GDP of major powers. Interpol identifies scam empires as a global human trafficking catastrophe. Chinese syndicate leaders, heirs to long histories of migration and illicit trade, weaponize the BRI's hybrid form — part state project, part neoliberal enterprise — to carve out new illicit sovereignties. As Enze Han observes, corruption, militarism, and digital capitalism collide in this space without restraint. The UNODC warned in 2025 that Southeast Asia's criminal networks, now armed with AI and cryptocurrency platforms like Huione Guarantee, have evolved into global titans. The syndicates are now "global leaders" in cyber-enabled fraud, money laundering, and underground banking. Their metastasis into South America and Africa spreads like a cancer, hollowing out states and corroding the foundations of governance.

SHI / 勢 (TENDENCIES, PROPENSITIES)

The Chinese concept of *Shi* (勢) refers to the dynamic disposition, configuration, or inherent potential embedded within a particular situation. Rooted in classical military strategy, especially Sun Tzu's *The Art of War*, *Shi* is not merely about force or power but invokes the ability to align with and manipulate the tendencies and propensities of a given environment. *Shi* is the strategic potential that emerges from a particular arrangement—temporal, spatial, relational—waiting to be activated. A well-calculated disposition of *Shi* allows one to act effortlessly, achieving maximum effect with minimal force, akin to a stone gathering momentum as it rolls down a mountain. François Jullien interprets *Shi* as the logic of efficacy in Chinese thought: rather than imposing change through direct action, one configures the initial conditions so that the desired outcome unfolds organically. In this sense, *Shi* embodies a form of immanent governmentality. The strategist intervenes at the embryonic stage—what Jullien calls *jizhishi* (幾之勢), the moment of incipient potential—embedding the desired transformation into the situation's own logic.

In the context of China's BRI, *Shi* describes the strategic arrangement of infrastructure, finance, and geopolitical influence as a long-term configuration akin to a solo game of Go. This logic governs not only territorial expansion but also the global logistics of power trafficked through ports, chokepoints, trade corridors, and digital networks. While *tianxia* provides the overarching vision, *Shi* is the operational principle, the calculated orientation of events geared toward China's advantage. It functions silently and systemically, preparing the terrain so that outcomes appear natural, even inevitable. Thus, *Shi* is not a tactic but a strategic atmosphere: the force-field of situation, awaiting activation, and yielding transformation without overt domination.

SMART CITIES DIPLOMACY

The United Nations projects that by 2050, 68% of the global population will reside in urban areas, with 90% of this growth occurring in Asia and Africa. This rapid urbanization demands sophisticated governance and infrastructure, driven by intelligence and technology. Smart cities—powered by data analytics, artificial intelligence (AI), the Internet of Things (IoT), and advanced communication networks—aim to optimize municipal services, reduce operational costs, and enhance citizen engagement. Amid rising demand for smart city innovation, Nadia Verjee aptly observes, "Cities are new diplomats in a world driven by urban collaboration." This notion introduces the concept of Smart Cities Diplomacy—a dynamic convergence of global relations, technology, urban expansion, and innovation. It reflects how cities, beyond being domestic governance units, are becoming active agents in international affairs. China has particularly excelled in leveraging the smart cities initiative as a diplomatic instrument to bolster economic and strategic ties with countries in the Global South. Since 2013, Chinese firms have exported smart city systems to 116 countries, including 38 in Asia, 30 in Europe, and 30 in the Middle East and Africa. Furthermore, under the Belt and Road Initiative (BRI), China launched a "social credit alliance" in 2018 involving 35 cities worldwide, aimed at coordinating the development of social credit systems across borders. This evolving landscape suggests that smart cities diplomacy is not merely about technology transfer or infrastructure aid, it serves as a vehicle for advancing China's broader geopolitical interests. Through digital infrastructure, surveillance technologies, and governance models, China is shaping the urban futures of partner countries while embedding its influence in global urban governance.

SOCIAL CREDIT SYSTEM (SCS)

China's Social Credit System (SCS) is a government-led initiative designed to encourage legal compliance and social trustworthiness by evaluating individuals, businesses, and institutions. While often portrayed in Western media as an all-encompassing surveillance network, the SCS is actually a complex, evolving, and fragmented framework rather than a single, unified nationwide score. Its origins trace back to the 1980s when the idea emerged as a rural banking tool to assess financial creditworthiness. Following the 2014 *Planning Outline for the Construction of a Social Credit System*, the SCS expanded to address broader societal issues such as tax evasion, environmental violations, and commercial fraud.

The system operates in two main areas: financial credit (like debt repayment and tax compliance) and social trust (such as adherence to laws, public behaviour, and, in some cases, online activity). Enforcement is achieved through "blacklists," which restrict access to credit, travel, and certain jobs for those deemed untrustworthy, and "redlists," which offer privileges such as expedited government services to those who comply with standards. Rather than functioning as a centralized national system, the SCS is implemented through dozens of decentralized local pilots—over 60, by some estimates—each with its own tailored metrics and experimental features. For example, some cities link scores to recycling, elder care, or traffic violations, though many programs remain voluntary or experimental. Since 2023, national integration is limited, and a proposed Social Credit Law aims to standardize data collection and address privacy and transparency concerns. Ultimately, the SCS represents an attempt to blend moral governance with digital infrastructure, encouraging citizens to internalize state norms in their everyday lives.

SOVEREIGN AI

Sovereign AI is a techno-political discourse that promotes developing and governing artificial intelligence systems in alignment with a nation's cultural, linguistic, and social specificities. At its core, sovereign AI is rooted in the ideology of technonationalism — the belief that a nation's economic vitality and security are inextricably linked to its technological dominance. This framework often results in state policies that prioritize domestic technological development over foreign competition, employing mechanisms such as subsidies, export controls, and restrictions on foreign investment or acquisitions. Within technonationalism, the state plays a central role in fostering high-tech industries, particularly AI, semiconductors, and digital platforms, as pivotal engines of national advancement.

Above all, sovereign AI positions itself as a strategic counterbalance to Anglophone-centric, Big Tech-dominated architectures. Localized AI model training and deployment are framed as acts of resistance to digital colonialism and assertions of national data sovereignty. In East Asia, this discourse is evident in various national AI projects such as Singapore's SEA-LION, Taiwan's TAIDE, and South Korea's NAVER HyperCLOVA X. These initiatives exemplify how sovereign AI can justify protectionist, deregulatory, and nationalist policies. Moreover, they reflect a techno-developmentalist agenda rooted in East Asia's tradition of state-led modernization.

However, beneath the veneer of innovation and national pride, sovereign AI reveals deep structural contradictions. The same rhetoric used to assert national autonomy can entrench corporate monopolies, worsen labour precarity, and invite unchecked deregulation. Understanding sovereign AI demands a critical lens on how technonationalist imperatives shape the political economy of artificial intelligence.

#sovereignty #techno-nationalism
#techno-developmentalism #AI

SURVEILLANCE HUMANITARIANISM

Political scientist Katja Lindskov Jacobsen introduced the concept of Surveillance Humanitarianism to describe the increasing reliance on surveillance technologies such as biometrics, digital IDs, and data tracking in the management of humanitarian aid. These technologies are often implemented to enhance the efficiency and accountability of aid distribution, particularly in refugee settings. However, they can also subject vulnerable groups such as refugees, stateless people, and migrants to new forms of control, monitoring, and exclusion. Jacobsen argues that humanitarian organizations, despite their intentions to help, frequently operate within a larger geopolitical context influenced by security, migration control, and donor priorities. Consequently, technologies intended to safeguard and support refugees can transform into tools of state surveillance and coercion, a phenomenon known as function creep. In Bangladesh, the UNHCR's biometric registration of Rohingya refugees was shared with the Myanmar government, potentially putting returnees at risk. In India, Adhaar issued to the Rohingya and Tibetan refugees is used for surveillance against them. Similarly, in Jordan, iris scan technology is employed to manage aid distribution in refugee camps, yet it offers refugees limited choice or control. In Kenya, biometric data collected for services in camps such as Dadaab have been linked to national security initiatives, raising concerns about deportation and data misuse. These instances demonstrate how digital identity systems, under the guise of humanitarian efforts, jeopardize the safety and dignity of displaced individuals. Surveillance humanitarianism calls for a critical reassessment of aid technologies, emphasizing the importance of ethics, consent, and human rights in digital innovation within humanitarian work.

TECHNO-FEUDALISM

The idea of techno-feudalism serves as a critical lens to examine the reorganization of power, wealth, and control in the digital era. It explores the new form of domination rooted not in industrial production but in digital platforms, data extraction, and algorithmic governance. Contemporary power in digital economies resembles the feudal system of the medieval period. Instead of landlords, the majority of wealth and digital infrastructure is controlled by a handful of powerful technology corporations. In the United States these include companies such as Amazon, Google, Meta, and X. In China, similar platform dominance is exercised by firms such as Alibaba, Tencent, ByteDance, Baidu, and Huawei, while in South Korea companies such as Samsung, Naver, and Kakao control key digital infrastructures ranging from semiconductor production to search engines and super-app ecosystems.

These companies act as the new ruling class, owning platforms, data, and the means of production, while users function as digital serfs. Yanis Varoufakis, an economist and former Greek Finance Minister, is known for his critique of modern capitalism, popularizing the concept to stress that capitalism is being replaced not by a more progressive system, but by something more reminiscent of the past, feudalism in a digital guise. He contends that each time we share content or interact with a platform, we are effectively working for free, much like medieval peasants did for their landlords. Digital platforms generate value from this unpaid labour, yet offer no compensation in return and thereby creating an increasing gaps of wealth inequality between the digital elite and users.

While the concept offers an interesting perspective for understanding the new forms of economic inequality, exploitation, and discrimination that permeates society with increasing digitalization, tech critics like Evgeny Morozov argue that the current dominance of Big Tech represents an evolution within capitalist logics, not a strict break from capitalism. Morozov insists that the focus should rather be on a materialist critique and systematic, class-based analysis that confronts exploitation and inequality as capitalist phenomena.

TECHNOLOGY

Argon
ASML
Copper
Cloud
Corpus
Deterrence
Disruption
Downtime
Entity List
e¥
Failures
Firewall
Ghost Tracing
Hemispheres
Internet of Things
ISO/IEC JTC1
Neon
Obsolescence
Photolithography
Point of Presence
Prediction
qi/dao
Real Time
Resistance
Sovereignty-as-a-service
Turbulence

TECHNOLOGY

Technology binds space and syncopates time. With a material propensity to organize social worlds, technology is surrounded by environments. The meshing of technology and environment assumes aesthetic sensoria. Technological forms exert a territoriality defined by spatial layers and circuits of time specific to logics of operation. Nineteenth century communication media such as telegraphy wired the spaces of colonial empires. Radio frequencies in the twentieth century wafted across national borders, only to quickly fade away. Twenty-first century computational infrastructure revives the space of telegraphy, combining submarine cables with digital systems to transmit, store, and process data signals, except when they move by Starlink. Each form of communication technology imbues space and time with distinct geopolitical and geoeconomic tendencies. Technology is never just technical.

Technology crosses Asia. From the wheel to writing, pottery to seafaring instruments, Asia's ancient technological trajectory does not fully align with Western periodizations—Bronze Age, Iron Age, etc. In the modern era, technology takes the blame for Asia's nineteenth century humiliation. Iron clad gunboats,

cannons, volley fire, and rifled artillery brought the age of unequal treaties and international law, unsettling social systems that favoured labour intensification over machines. In China, the fantasy that guns, ships, factories, and science could be imported without disturbing an Asian essence ran up against the military successes of Meiji Japan. The response was a retooling of traditions, a vision of Asian civilization and unity flourishing beyond an age of technology and sovereign states.

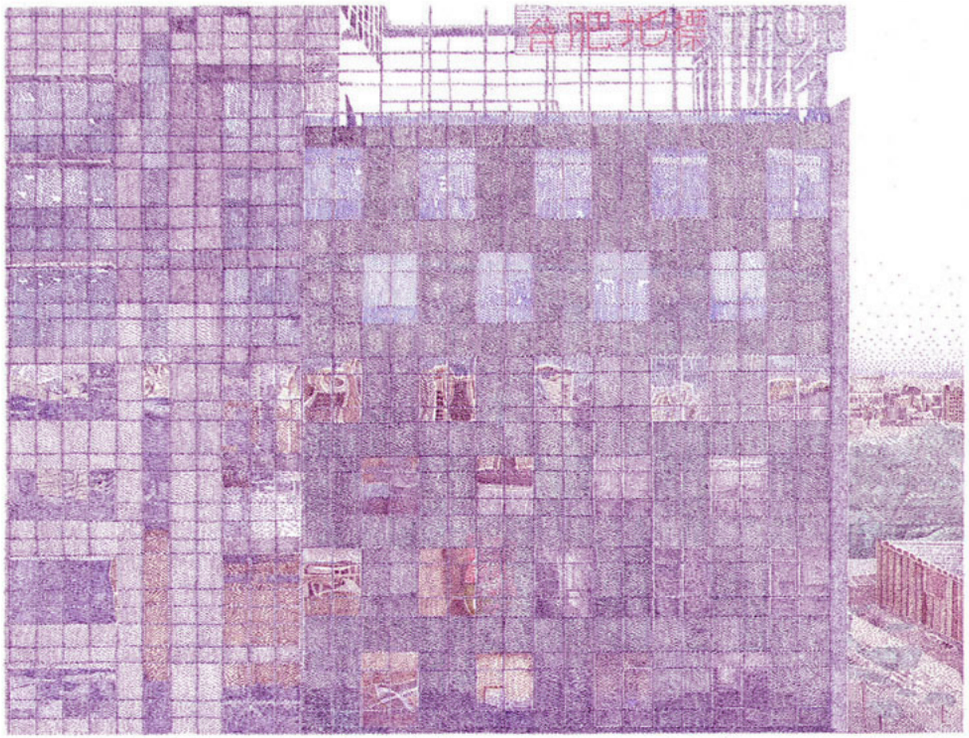
Such civilizational visions persist in the age of AI and self-coding machines. Claims for a second China shock have gone beyond arguments about the West needing to position itself in China-centred supply networks. They venture to suggest that China has made a phase change in experimenting with modernity, despite or perhaps precisely because the West has attempted to limit its technological development through sanctions and export controls. Renewable energy and chip technologies are two registers of this predicament, each with their distinct patterns of sourcing, production, and distribution. Technology standards emerge as abstract objects of geopolitical competition, and the spatial and infrastructural footprints of the resulting technologies expand beyond the territorial control of any single state.

The concepts that follow offer an incomplete map of this changing scenario, starting points or end points for an analysis that may never take place.

ARGON

Argon comes from stellar nucleosynthesis in supernovas. Doubling the water vapour, it is the third most abundant gas in Earth's atmosphere and the first on the Earth's crust. Argon, whose etymology ἀργόν means "lazy," is used as an inert shielding gas. Once extracted from liquid air, it can clean the smallest, most fragile microchips. In lithography, Argon enables the etching of the smallest patterns on semiconductor chips. In silicon wafers, Argon gas protects the silicon crystals from any potential reactions with oxygen and nitrogen at high temperatures.

ASML

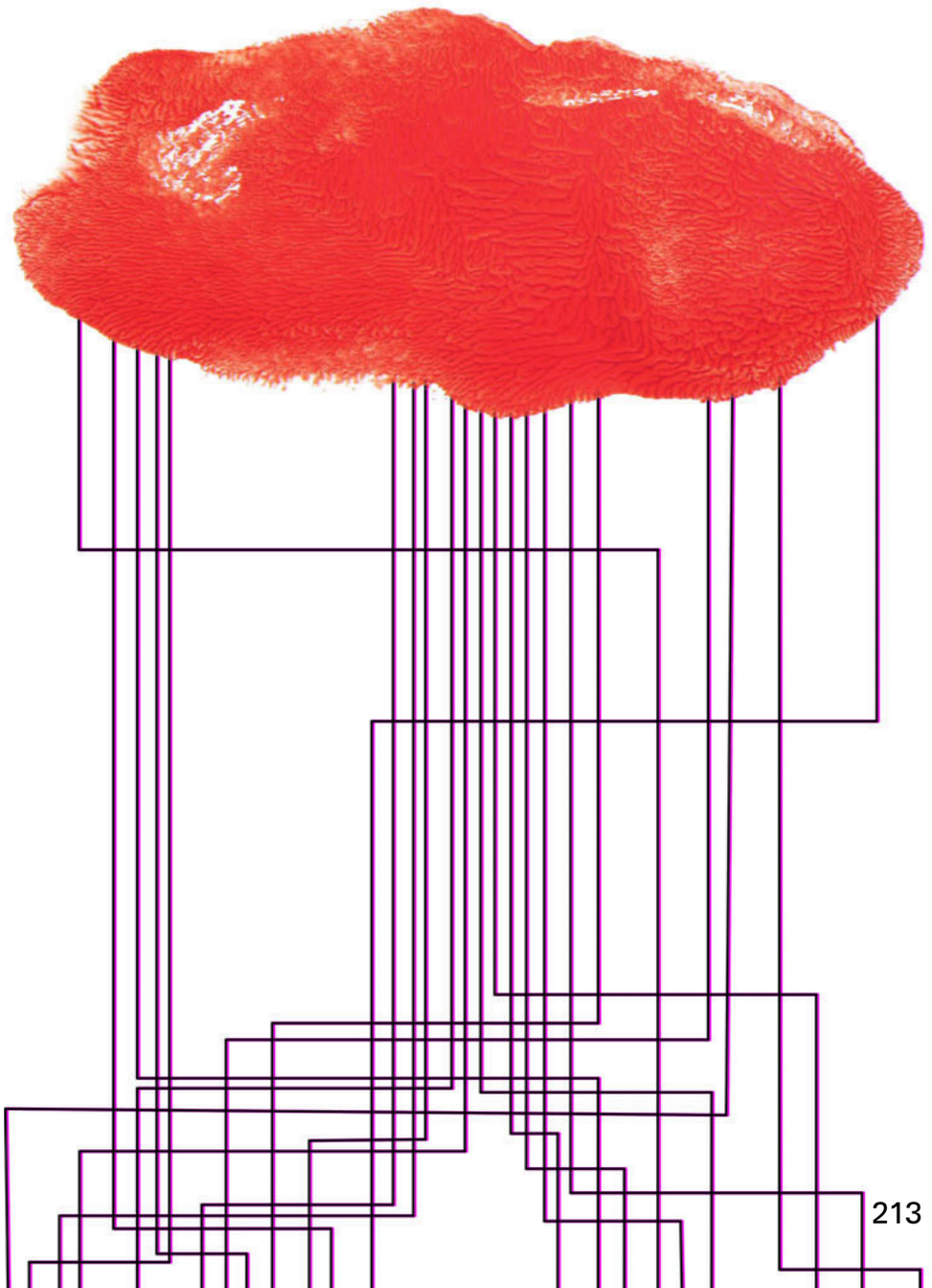


COPPER

In contradistinction to the *Aufbau* principle established by Niels Bohr and Wolfgang Pauli, which stipulates that electrons will fill orbital shells of the lowest energy, the copper atom has only one electron in its outer shell. Far from the attractive force of the nucleus, this electron can be easily excited to vacate the atom's structure, making copper an extremely effective electrical conductor. Together with its wide natural occurrence, this physical characteristic spurred the growth in copper's industrial demand. Image production is a case in point. Whenever and wherever the history of electronics intersects with the history of photography, copper is present. If silver and rare earth elements such as europium are the protagonists of photography's material history, in its chemical and digital phases respectively, copper is its secret sharer, ubiquitous but eclipsed by more photosensitive and luminescent substances.

CLOUD

Clouds move freely above the earth, blowing, drifting, and surging to multiple ends. In computing theory, the cloud is an apparatus of near real time data sharing: an infrastructural facility and technical process that has transformed compute from a scarce resource to an abundant service. Within virtual machines and containers, clouds result from a double process of abstraction, decoupling hardware from software and software from operating systems, enabling data to be run, not owned, on networked infrastructure. Cloud means fog. The cloud computing regime has given birth to an obscure and concentrated system of knowledge and information sharing. Cloud means electricity, land, and water, as computing infrastructures require an increasing number of natural resources to run and cool their servers. Cloud means labour. Behind the green and red lights flashing on their racks, data centres run the circulation of value in real time, accelerating capital turnover, enabling automation. The cloud is weighted and overheated, air conditioned, dotted around the earth, secured through obscurity, and arrayed in rows. Clouds contain, and they also spill over.



CORPUS

Scrubbed from the digital *bibliothēkē*, corrupt corporations, gossip subs, or chatrooms, this most behemothic collection of deciphered scribes or nuncupative concordance is used for Natural Language Processing. Language of Thought theories trace mentalese through a mirror of minds, while provocateurs navigate the taboo with a choir of opinion. A corpus is an annotated legion of locutions confirming linguistic determinism, as if thoughts were corporeal.

DETERRENCE

Deterrence uses threats or military display to dissuade potential adversaries from hostile actions. Deterrence is distinct from pre-emption, which can involve striking first to neutralize an imminent threat before it can materialize. In the world of subsea cables, deterrence is a strategy pursued by actors who believe that threats of damage can be forestalled through diplomacy and sanctions. Cable cutting has a history, from telegraph cable cutting in World War I to today's world of submersible weapons with precision tools rigged to sever the lines that underlie communication technologies and information economies. Can such actions be deterred? Cable cutting is replete with rumour and deception. Cables severed by fishing trawlers ornatural erosion become the subject of accusations and counterclaims. From Taiwan to the Balkans and the Baltic, cable cutting is the object of geopolitical drama. Deterrents here are replaced by declaratives—you did it—which conjure worlds of paranoia, disruption, disconnection, and blockade.

DISRUPTION

Disruption is an unsettling of sometimes shocking proportion caused by natural or social forces. The term is often associated with earthquakes or fires as well as pirate attacks. Disruption is also a predictive tool and mechanism for justifying technocratic restructuring. Infrastructure develops according to the relations between possible forms of disruption and levels of redundancy. Unsettling these relations can be done by blocking operations, grass-root protests, sit-ins, or strikes. In the digital sphere, obstruction of routine activity can take the form of hacktivism, virtual sit-ins, or other modes of cyber disobedience. While disruptions potentially create organizational chaos, they also foster new alliances, expose injustices, and realign power structures—paving the way for new beginnings.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DOWNTIME

Downtime is the precondition of runtime. Downtime is the period to recover. Downtime is compulsory rest, enforced, necessary to turnover and production. Downtime is the time of maintenance and repair. Downtime opts out. Downtime is a holiday. Stakhanov mined 102 tons of coal in less than six hours. He received downtime as a reward. Downtime is waiting, an interval to unwind and recharge, to fend off overheating, breakdown and burnout. In the digital economy, downtime undermines customer trust. Downtime must end soon for the user's sake. If downtime extends, people complain. Downtime diminishes productivity, revenue, and reputation, yet cannot be avoided if these activities and expectations are to rule the day. *Nua*, *lepak*, *siesta*—these are local variations of downtime, traditional evocations of loafing and idleness. The history of automation creating downtime for workers is a long illusion. The right to be lazy brings more work. 24/7 digital culture creates an interminable non-time that spans the globe. The market pushes through every hour of the clock. What's the point of even sleeping?

ENTITY LIST

A license collection compiled by the US Bureau of Industry and Security is a list of identities believed to pose a risk to national security. Since 2020, China has similarly implemented an Unreliable Entity List. A multi-barrelled cannon, a loosely painted portrait of a bare-breasted woman of the people and her fellow travellers, a “Little Dancer of Fourteen Years” for its likeness to a rat and her sister’s boyfriend’s criminal duo — these are not benighted gestures. The unclean caches, a couple of zombies with guts swollen with neighbours, a lip-biting Bored Ape Yacht Club #8585, and the Nyan Cat are not subcultural detritus, but are less tolerated than a “very far-reaching bullet.” Mitterrand’s Egyptian fetish wore down the bust of Dalida. Similarly, most entities listed are derived from promiscuous downloading. Yet, with an obsessively pristine reserve, an art collection can build provenance.

e¥

e¥ is a legal tender issued by China's Central Bank. It is encrypted and backed by the country's credit. It is a digitalized form of the RMB. e¥ is designed to load into an individual's digital wallet and protect against black market transactions, tax evasions, and potential peculations in public funds. It is also envisioned to facilitate cross-border transactions and reduce reliance on US dollar dominated financial systems, such as SWIFT. Along with other currency instruments such as the BRICS unit, e¥ is a vehicle of dedollarization. e¥ derives its geopolitical significance from this capacity to diminish the status of the US dollar as the world's reserve currency. As part of a new global financial architecture, e¥ guards China against possible future sanctions and has effects way beyond the territorial boundaries in which the RMB serves as legal tender. As a technological means to counter the use of the dollar as an economic weapon, e¥ provides a pathway for RMB internationalization. Paradoxically, this process requires establishing a large pool of the currency outside of China. e¥ is imagined both as a means to coax China's trading partners into accepting RMB payments and as a way to encourage foreign investment in Chinese financial markets. The project of currency strengthening around a new financial and geopolitical pole thus involves opening to the world, not closure around national markets and imperatives.

FAILURES

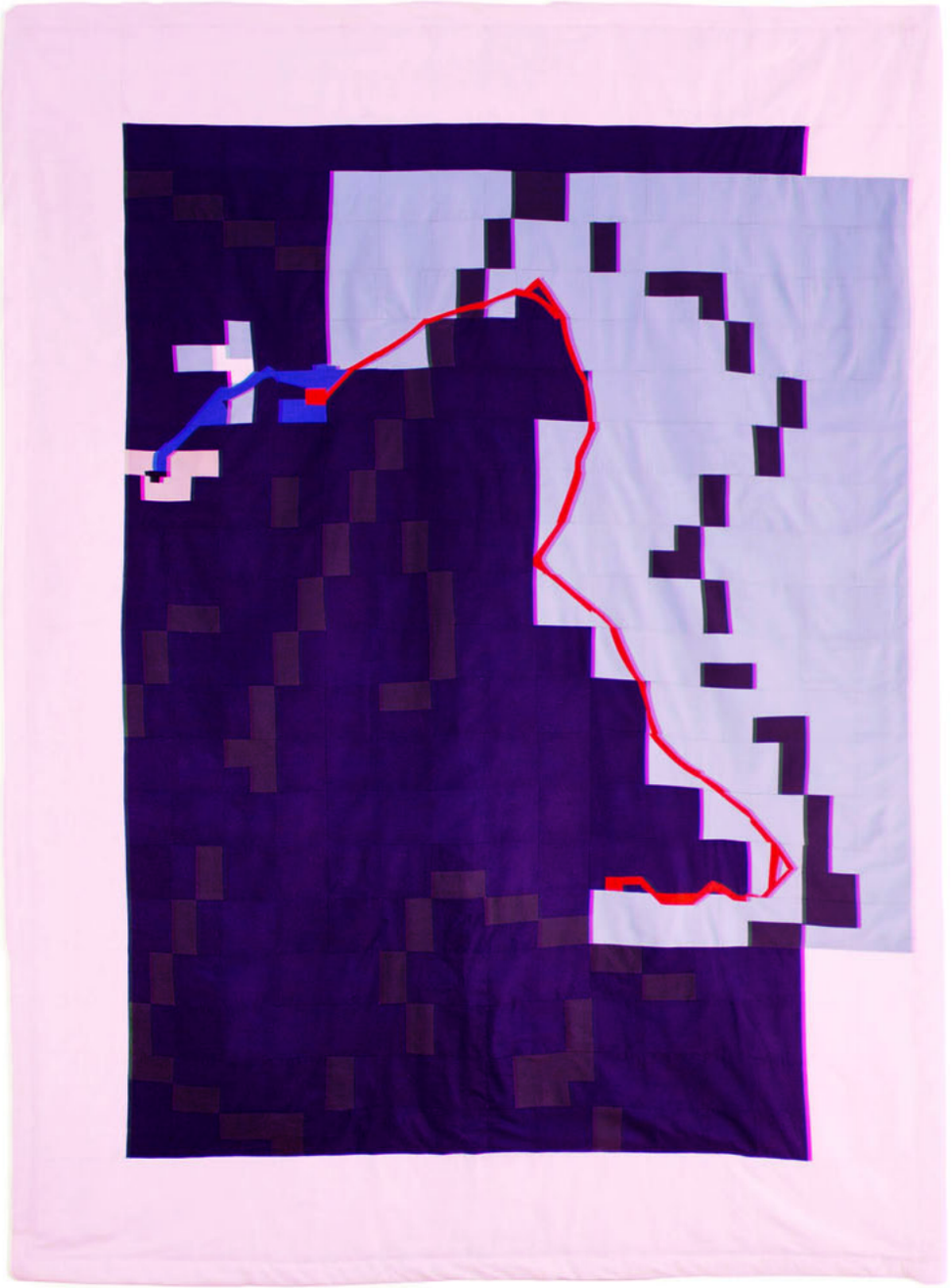
Failures result from interruptions that provoke system meltdown. Failures shape the geography of infrastructures, which are designed and located to avoid disruptions and build in redundancy. Failures occur due to a lack of maintenance. Machines are not alone in experiencing failures; humans are inherently prone to fail. Personal failures result from the interruption of a cycle of expectations and the beginning of another. Failures elicit responses and precipitate new encounters. “Try again, fail again, fail better” (Beckett) is the credo of startup culture. Setbacks are imagined as excuses for enrichment and success. Beyond creative destruction, failure confutes the necessity of venture capital for technological innovation. Infrastructures of all kinds are made symbolically concrete when they fail.

FIREWALL

The Great Firewall system was gradually installed in China since the 1990s, though it is unevenly distributed across the country. It is an information censorship infrastructure designed to prevent citizens accessing selected foreign websites, depending on the prevailing mood. The Great Firewall installs a border within the seemingly borderless virtual world. The proliferation of virtual private networks (VPNs) in China instantiates the grassroots countermovement of this national censorship program. You need a proxy to channel through the cracks and break the firewall. Installing a VPN on your device is usually the first step for being a globalized netizen—a self-training process to technically overcome the virtual blockade. VPN programs provided by anonymous people are circulated among clandestine online gatherings in which people come and go. Building and purchasing a personal VPN is against the law, while government officials also secretly use them to collect uncensored information and devise policies.

GHOST TRACING

A methodology of art creation that illustrates how the human component of data acts as a glitch within the machine. Derrida's open definition of the "always-already absent present" situates existence in a network, without a body, with digital communication embedding the ghost of its creator—digital assets as a poltergeist. Tracing is a debugging technique used by software engineers to understand the execution of a software program through its trace log. Ghost tracing reveals the incompatibility of this human component and how our whimsy is at odds with these systems.



HEMISPHERES

Hemispheres divide the world, split the cortex. The left mobilizes language and logic. The right monopolizes creativity and emotion. North, south, east, west: hemispheres announce economic and cultural divergences with no real ground. Hemispheres are geopolitical fictions riddled with unexamined spatial assumptions. Larger than regions, more geographical than civilizations, hemispheres profess to geophysical reality. Yet hemispheres are figments of geometry. Hemispheres are eidetic (Husserl), ideal forms with a curved surface and a flat circular base. The volume of a hemisphere is given by $2/3\pi r3$.

INTERNET OF THINGS

With 18.8 billion devices globally, and counting, the Internet of Things consists of sensors, software, and network connectivity that collect and share data through an ecosystem of linked objects. Wearables, smart appliances, homes, or whole cities. You can now trade in your basket of remotes for a version of Xanadu 2.0, swapping wall art with a voice command. The Prancing Pony was the first, a vending machine named after a bar in Middle Earth, with the chance to double your money every 128 times used. Sounds tremendous until an army of toothbrushes cripple network security, your Jeep is doing doughnuts in the parking lot, your fridge orders a year-long supply of bran after the chicken wing budget from the local school was purchased on your credit card, and your insurance premiums hike. Your baby monitor wakes your infant every night at 10 o'clock with whispers from strangers, and your lights speak in Morse code. If you dare part the cat from the Roomba, you'll hear the roar from your child's animal button puzzle. Be prepared to be invaded.

ISO/IEC JTC1

ISO/IEC JTC 1 designates the International Standards Organization/International Electrotechnical Commission Joint Technical Committee 1. Since 1960, this body dictates standards for computing and information technology across various industry sectors. The committee operates through numerous subcommittees, each focusing on specific areas of IT standardization. Standard setting is a political process. ISO/IEC JTC 1/SC 42 focuses on artificial intelligence, while ISO/IEC JTC 1/SC 27 addresses IT security techniques. For technical standards to operate they must often incorporate standard essential patents. The decision for a certain standard has implications for intellectual property rights, licensing fees, and jurisdictional matters embedded in the geographies of patent registration. ISO/IEC JTC 1 is committed to creating interoperability among technological systems that operate across geopolitical borders. Members are experts from different countries and industries who swear to collaborate and manufacture consensus. While the US holds the dominant number of votes in many subcommittees, the PRC has launched the China Standards 2035 Initiative to increase its sway on global technological standards. ISO/IEC JTC 1 is an ethnography free zone. It needs an anthropologist to unravel its kinship relations, kula rings, and potlatch ceremonies.

NEON

Neon is lighter than air. Highly inert, neon atoms emit energy at steady wavelengths, producing coherent and monochromatic light, a fundamental requirement for laser operations.
Laser lithography is essential to silicon chip production.
Neon production is concentrated in Ukraine. Companies like Ingas and Cryoin have halted neon production due to war.
Semiconductor production is concentrated in Taiwan.
Neon shortage leads to chip shortage. Neon is colourless and odorless. The atomic number of neon is 10.

OBSOLESCENCE

We are terminating your position, effective immediately. You're "no longer needed or wanted, even though … could still be in working order." Car trade-ins, bicycle redesigns, and constant software updates, but still transmitted by fax. The pink slip read, David Reuben sneered, "not really a man but no longer a functional woman" with ovaries that have dimmed to a vestigial. You're in a "transition from available to unavailable" management supported by IEC 62402:2019, always has an opinion on obsolescence, wetware, and hardware alike. Online, we are all girls. A "psychic operation in which the self is sacrificed to make room for the desires of another," rebutted Andrea Long Chu. Uploading our earthly bodies, we become lustrous, debonair digital darlings. Your silken vacation shots become an immortal pleasure. You have felt that *devil-may-care* self-confidence before, like when jailbreaking a phone for the longevity of its batteries, and you have to admit scanning the profiles of parched individuals; they do seem to be posed in cryopreservation with the right to be forgotten.

PHOTOLITHOGRAPHY

Spreading the word in 1798, Alois Senefelder—actor, playwright, and "Connoisseur of Girls'—tampered with oil and water's immiscibility. Printed matter is now indebted to lithographic ability to produce a positive image of likeness. Making light ofthe family's delusion with an internal combustion engine, Joseph Nicéphore Niépce drew with the sun, bitumen of Judea, and a transparency in 1826. A caliginous heliography, or the first photograph, was created by navigating the poisoner's corridor, also known to soothe seclusion. Jay W. Lathrop and James R. Nall, in 1955, exploited photolithography for patterning semiconductors, winning the right to buy a family car. Contemporaneously, Jules Andrus and Walter Bond at Bell Labs adapted photolithographic techniques to silicon wafers. Miniaturization has refined engraving to as small as a few nanometers. Russian precision-guided munitions are now being replaced by the harvests of washing machines for microchips. This miscible invention has transmogrified into a fight for technological dominance, war instead of spreading the word.

POINT OF PRESENCE

A Point of Presence is an access point within data centres, serving as the nexus where multiple networks and communication devices converge. Physically manifesting as an intricate jumble of cords, it creates a confluence where information flows and concentrates with precision. This interconnection carries economic and environmental implications. While Points of Presence enable crucial data access, they operate from secure, inaccessible facilities. They function at the remarkable speed of picoseconds (0.000000000001 of a second), anchoring themselves in the here and now. In their abstract form, they drive toward the ultimate goal of eliminating space and time. Though a point in geometry represents a dimensionless ideal of pure position, this concept falls short of tangible reality. You can't traffic information through something that doesn't exist. Points of Presence necessarily conform to network ontologies, operating within clearly defined systems of axioms, relationships, and dependencies—both topological and material. These junctions generate intense bursts of speed, existing not in fixed time but in pure functionality. Each Point of Presence inherently defines its counterpart: a site of absence.

PREDICTION

Prediction results form a double act of translation: first, knowledge is turned into data, then data is turned into predictive information. Prediction is never neutral; it is a political engagement with the past, the present, and the future. Predictions are never accurate, yet they enforce fate and faith. A long time ago, spiritual figures could foretell future events by staring at the twisting shape of a fire's flames or gazing at the flight of birds cast into the sky. Today, predictions are made by algorithms inspecting clouds of data. Predictions are poetical acts engaging with our intimacy, fears, and desires.

qi/dao

In traditional Chinese metaphysics, *qi* (器) refers to *an instrument* and *a skill*, it has a specific form, function, and capability. The existence of *qi* is rooted in *dao* (道), which means *the principle of the universe*, *the spirit of human being*, and *the guideline of the society*. Together, *qi* and *dao* form an inseparable unity in Chinese thought. This unity has historically shaped the concept of technology in China, emphasizing harmony with nature rather than domination over it. The ideological separation between *qi* and *dao* occurred in the nineteenth century when the country was defeated by western and Japanese powers in a series of wars. Threatened by the war, *qi* was reinterpreted as a weaponized power to defend sovereignty, simultaneously, *dao* as a Chinese cosmopolitan idea was challenged and reshaped. The reinterpretation of *qi/dao* marked a process of "de-orientation"(Yuk Hui) in a technologically determined world.

REAL TIME

Technically, real time is a temporal regime resulting from a synchronization of runtime and downtime. Ideologically, the language and imaginary of real time obscure the social and historical circumstances of its emergence and proliferation. Real time is fictional and abstract, yet it is manifest and concrete. Latency is the technical limit to real time. Between the input and the output is an interval, a digital switch between zero and one and time taken for information to circle around back in altered form, between device, server, data centre, cable. Real time is a metaphor that obscures the infrastructure of communication technology and the digital encoding of information. Real time is not clock time. Real time is not lived time. Real time is not historical time. Real time is not the totality of time.

RESISTANCE

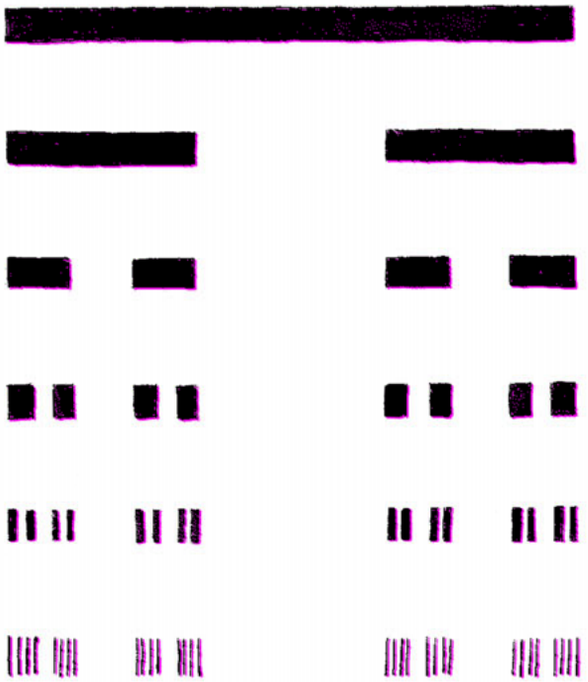
For Ohm, voltage equals current times resistance. Resistors reduce the flow of current in a circuit. Without resistance current surges and shorts the circuit. Resistance is the precondition of transmission. Without resistance nothing circulates — electrons, information, goods, capital. Resistance comes first (Foucault), the counter to power. This credo of constitutive power reverses the reactive logic of resistance, which falls into pushing back. Labour before capital, subaltern before hegemon, subject before sovereign — these forms of precedence defy chronology and measure, providing grounds for organization and struggle.

SOVEREIGNTY-AS-A-SERVICE

Sovereignty is for sale. The sovereign is not a master. The sovereign is a server. From flags of convenience to extraterritorial arrangements, sovereignty mutates with technologies and historical circumstances. The latest round of digital technological developments brings new articulations of sovereignty and power. Populations and territories bend to code. The sovereign capacity to decide is outsourced to algorithms. Automated micro-decisions determine the most efficient route through networks, processing speeds, or the priority of incoming data packets. The server-client relation generates new territorial forms, non-contiguous and open to transborder flows. No one proposes to put a tariff on data transactions. Yet location matters in the world of data centres and digital infrastructures. Nations compete with tax breaks, energy incentives, water supply, and skilled labour resources to bring these facilities to their shores. They push further with data sovereignty regulations that seek to territorialize certain categories of data. Everywhere the vestiges of an international system of sovereign states, vouchsafed by colonial struggles, crosses the prerogatives of platform power and sovereignty-as-a-service. AI occupies the throne. The sovereign sticks around to take the blame.

TURBULENCE

Divide a line into three, removing the middle part, and repeat until left with clusters of dots. Alignment with the disruptive static in your next conversation over the phone is certain, despite your sense of free will. “Turbulence is more difficult,” mused Benoit Mandelbrot. Can we exploit this turbulence in other forms of broadcasting? Can we become the Russian Woodpecker by squatting abandoned spaces, creating immersive installations as allegories, deep-frying memes for authenticity, and personally designing corpora?



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Concepts hold the world together. But what happens when the world fragments, explodes in war, faces the epistemic collapse wrought by AI, or the ravages of climate spun out of control? Concepts also disintegrate, lose their self-positing status. And yet critique does not simply dissolve in conditions of radical uncertainty. There is a hunger to critique. It finds new forms, partial, provisional, forged from within instability rather than above. *Transit Asia Critical Concepts* emerges from this conceptual turbulence.

The concepts gathered in this book are not designed to map Asia, to fix its contours, or confirm its coherence. They move across Asian environments, through infrastructures of labour and logistics, inside computational architectures and their human remainders, against the unevenly distributed catastrophes of climate and war in ways that exceed the regional frame they inhabit. That excess is not incidental. It is what thinking from Asia produces, a movement beyond the cultural imaginaries, institutional settings, and lived encounters that give Asia its apparent shape.

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