Platform Interfaces and Gendered Design in Postcolonial Cities: Toward Cultural Sustainability and Ethical Algorithmic Futures

Zhuowei Li

University of Zurich，Zurich, Switzerland

Abstract

This paper is discussing how gendered assumptions could be found in the platform interface design, especially under the context of postcolonial digital environment. The research, mainly based on interpretive method and also some interaction simulations, takes examples from mobile platforms in places like Hong Kong, Macao and Singapore. It is trying to find out how different design elements—color, gestures, algorithm of personalization, etc.—are making the digital behaviors of users become normalized in some invisible but effective way.

In this case, interface is not just a tool. It is a cultural thing, and the way it works can be ideological. The study used visual analysis together with experimental design methods. One finding is that gender shows up not directly but through small details. Some personalization strategies, for example, do not always support the user, but sometimes silently limit them.

This article tries to offer a contribution to feminist tech studies and also platform research in general. The idea is to see interface design as something not only technical but also connected to power and also cultural control.

Keywords

Gendered Algorithms, Platform Cultures, Postcolonial Media, Digital Sustainability, Ethical AI, Inclusive Design, Cultural Transformation

1. Introduction: Algorithms with a Gender

This paper explores how platform-mediated environments encode not just gender but also cultural assumptions about progress, civility, and control. In doing so, it speaks to emerging debates on digital sustainability, AI ethics, and the transformation of everyday behaviors through algorithmic governance. These gendered systems do not merely reflect social values—they shape behavioral norms and algorithmic standards in ways that directly impact the inclusivity and long-term sustainability of digital ecosystems.

As digital platforms continue to mediate everyday life, their algorithms are often perceived as neutral, objective, and invisible. Yet recent studies in feminist technology criticism and media theory continue to challenge the myth of neutrality. Algorithms are shaped by—and in turn shape— human inputs—they also encode, reinforce, and reconfigure deeply gendered logics. Whether through voice assistants defaulting to female personas, recommendation systems privileging male-coded behaviors, or interface designs that reward certain forms of attention and control, algorithmic environments often perform masculinity or femininity in noticeable and patterned ways.

This paper explores how these gendered performances of technology play out within postcolonial urban environments. Focusing primarily on cities such as Macao, Hong Kong, and Singapore—spaces marked by hybrid cultural legacies, uneven modernization, and intense platform penetration—I argue that algorithmic gender is not merely a Western export, but a global phenomenon filtered through local desires and historical wounds.

The aim here is not to establish a universal model of how gender “exists” in algorithms, but to ask: How do algorithmic cultures in postcolonial cities render certain gendered forms visible, desirable, or obsolete? What kind of femininities and masculinities are being amplified—or erased—by data-driven systems? And what does this tell us about the continuing entanglement between modernity, media, and colonial afterlives?

2. Literature Review: Situating Gendered Design in Platform Cultures

Digital platforms increasingly shape everyday experience not only through the content they deliver, but through the interfaces, rhythms, and expectations they encode. Feminist scholars have long argued that such technological structures are far from neutral. As noted in foundational feminist technology studies [1], the history of technology is also the history of gender.—how authority, rationality, and speed have been gender-coded into machines themselves. More recent reflections on AI and feminism [2] further highlight that artificial intelli.

Algorithmic operations, in this sense, are not invisible abstractions. They are made visible, felt, and navigated through interfaces—what users see, touch, and respond to. “Fairness” in AI, as West critiques [3], is often reduced to narrow

statistical logics, ignoring the deeper social assumptions about behavior, legibility, and conformity. This critique is extended by Costanza-Chock's "design justice" framework [4], which asks who is imagined as the default use and who is excluded from the sc.

Yet gender is never abstract. It is always situated, and it moves differently through different places. Media infrastructures in postcolonial urbanism have been critically examined in works like Sundaram's media ethnography of Delhi [5]. And [6] remind us that media infrastructures—like cities—are layered with uneven histories, shaped by colonial governance and informal negotiation. Scholars studying media urbanism in Delhi and social media dispossession in the Global South [6], highlighting how platform systems encode material inequalities in emerging digital markets.Digital systems are not separate from political or material structures—they are deeply entangled with them.

When we look at how platforms operate within broader systems of design and governance, it becomes clear they do more than just connect users. Platforms, as described by Gillespie [7], shape what becomes visible or valuable, and who gets to speak. Similarly, Zuboff's work on surveillance capitalism [8] shows how the logic of datafication relies on user behavior being made observable, measurable, and easier to categorize.In such a system, interface choices become governance decisions: defaults, icons, color palettes, even scroll directions contribute to the shap.

While these works provide valuable frameworks, relatively few studies focus specifically on how interface design performs gendered expectations in the context of everyday usage—particularly in cities shaped by postcolonial histories, multilingual publics, and fractured modernities. This is the space where the current study intervenes. By observing platform use and interface interaction in Hong Kong, Macao, and Singapore, this paper brings together gender theory, urban media analysis, and critica.

Closing Notes

This literature review has traced the major debates informing this work: from gender performativity to interface logic, from feminist technology critique to postcolonial media studies. Each contributes a strand of insight into how gender becomes visible—or invisible—within algorithmic cultures. But what binds them is a shared concern: that what we see as "natural" in digital life is, in fact, profoundly structured.

This study joins that concern, not to indict all platforms as oppressive, but to show how even the softest UI, the most cheerful notification, or the most seamless login flow, can carry with it the long shadows of history, hierarchy, and hegemonic aesthetics.

3. Methodology: Situated Reflexivity and Multi-Scalar Interface Reading

By embedding the researcher within daily platform use, this methodology surfaces not only how gender is algorithmically scripted but how such scripting interacts with broader behavior-modification strategies in contemporary digital consumption.

This research follows a critical interpretive framework that draws from feminist epistemology, postcolonial theory, and interface ethnography. Rather than seeking statistically generalizable claims, the aim is to surface meaningful patterns, design logics, and user experiences embedded in algorithmic media environments across Macao, Singapore, and Hong Kong.

3.1 Researcher Positionality and Reflexivity

As a researcher embedded within the Greater China region but not entirely of it—a user of these platforms, a Mandarin-Cantonese bilingual, and someone trained in Western academic traditions—I inhabit a hybrid positionality. This inevitably shaped what I could observe and how I interpreted patterns. For instance, I often found myself instinctively reading certain UI layouts as "soft" or "aggressively corporate" before realizing that such evaluations were culturally coded.

The study consciously embraces this reflexivity. Rather than pretend to occupy a neutral "nowhere," I acknowledge my embeddedness in the platforms I critique. I downloaded, used, and navigated Aomi, GrabPay, OCBC apps, Little Red Book, and more—not as a distant analyst, but as a partial participant-observer. When analyzing how a notification sounds "feminine," or how a layout invokes "performance control," I am also speaking as someone who has been interpolated by these interfaces.

3.2 Data Collection: Platform Observation and Algorithmic Tracing

The core of the empirical work involves close interface observation and algorithmic pattern tracing. These took place over a three-month period (March to May 2025), covering:

Initial onboarding sequences: Each platform was installed on a clean device with no prior app data. The default interface language, visual identity, and behavioral cues were recorded through screen captures.

Seven-day habitual use simulations: I simulated user routines (e.g., daily meal ordering, checking crypto prices, exploring cafes) and documented notification timing, interface adaptation, and algorithmic suggestion loops.

Special event tracking: For Aomi, data were collected during the Macau Grand Prix period and Chinese New Year, noting festive UI overlays, push content, and gendered recommendations.

A total of 217 UI instances were screen-captured and tagged using an open-coding schema developed via iterative refinement. Nvivo was used to cluster recurring themes: e.g., "interface softness," "risk visualizations," "emotion scripting," and "language-switching markers."

3.3 User Narratives and Thick Description

In addition to observational data, I conducted five semi-structured interviews (3 in-person, 2 via online voice call). Participants included a young food vlogger in Macao, a fintech employee in Singapore, a UI designer from a Hong Kong startup, and two ordinary platform users who had recently changed their gender settings on social apps.

Rather than treat these accounts as representative samples, they are read as embodied testimonies—moments where the friction between algorithmic culture and personal subjectivity becomes visible. One participant, for example, described how her Aomi feed "feels like a mood board made by someone who thinks I'm a soft girl—but I'm just hungry." Another mentioned switching to English UI because "the Chinese interface made me feel like I was being sold romance."

These fragments offer not evidence in the statistical sense, but evidence of sense-making: how users interpret, negotiate, or resist the gendered scripting of their media environments.

3.4 Interface Archeology and Comparative Semiotics

To triangulate my findings, I engaged in a low-tech form of "interface archeology." This involves comparing UI elements across platforms and across time—examining archived versions of apps (via APKs and user screenshots), mapping color schemes, font styles, iconography, animation behaviors, and copywriting tones.

For example, I tracked the evolution of the GrabPay dashboard from 2021–2025, noting how it moved from transaction-based minimalism toward a more gamified, achievement-oriented visual grammar. Meanwhile, Aomi's 2023–2025 updates increased the use of soft gradients, kawaii emojis, and animated food mascots—suggesting a strategic intensification of feminine-coded aesthetics.

To compare interface aesthetics across platforms, I constructed a semiotic grid focusing on elements like...

Table 1. Comparative Analysis of UI Features between Aomi (Macao) and GrabPay (Singapore)

UI Feature	Aomi (Macao)	GrabPay (Singapore)
Dominant Color	Pastel pinks, coral	Navy, graphite gray
Button Shape	Rounded, droplet	Rectangular, edged
Font	Sans-serif, playful	Geometric, tight
Error Messages	"Oopsie~ try again!"	"Invalid transaction."
Celebratory Animation	Confetti, petals	Progress bars, badges

As shown in Table 1, distinct design logics emerged between the two interfaces. Through this comparison, certain gendered design logics began to surface—not just in what platforms say, but in how they feel and respond.

3.5 Triangulation and Limitations

To ensure interpretive depth, triangulation was used in three directions:

1. Platform Intentions – Inferred from press releases, design blogs, and app update logs.

2. User Perceptions – Extracted from interviews and app store reviews.

3. Interface Behavior – Analyzed from the app's own visual and functional responses.

That said, there are limitations to this study that should be kept in mind. For one, algorithms are not fully transparent—we only see their effects, not how they actually work inside. Also, platforms keep changing. What the interface looks like today might not look the same tomorrow. I also bring my own background into this research. I present as female. I'm highly fluent in Mandarin and have only moderate familiarity with Cantonese. I'm also fairly comfortable with digital tools. All of this inevitably shapes how I understand and interpret what I observe.

Still, by layering observation, narrative, and design dissection, this methodology aims not for finality, but for critical thickening—a way of tracing meaning across pixels, policies, and power.

4. Theoretical Histories: Gendered Technologies and Colonial Code

Framing algorithms as extensions of colonial and gendered governance enables a critique of current personalization systems that streamline user behavior in the name of optimization—raising urgent questions about algorithmic ethics and cultural legibility.

To understand how algorithmic platforms perform gender and urban modernity in postcolonial cities, we must first recognize that neither gender nor technology are natural or ahistorical categories. Both are built, layered, and recursively performed through the material and symbolic infrastructures of modernity. This chapter traces two genealogies—gendered technology and colonial media power—arguing that their convergence is neither coincidental nor neutral.

These interface elements can be read as extensions of broader ideological and aesthetic logics that continue to shape how attention, affect, and authority are visually coded. From textile looms to TikTok, from imperial maps to interface maps, the tools that shape our digital experiences are haunted by histories we have yet to fully reckon with.

4.1 Gendering the Machine: A Brief (and Biased) History

Technology has always been gendered. But not always in the same way. In the 19th century, the typing pool, the telephone switchboard, and the sewing machine were feminized technologies—linked to patience, dexterity, and domesticity. By contrast, early mainframe computers, and later personal computers, were masculinized—associated with logic, control, and warfare.

Sadie Plant [9] provocatively inverted this history by tracing a feminine lineage in the DNA of computing itself. She argued that the textile patterns of the Jacquard loom—the first programmable machine—anticipated the logic of binary code. Plant also celebrated Ada Lovelace as not merely the first programmer but as symbolic of an alternative, non-masculinist relationship to computation: poetic, speculative, and intuitive.

While Plant's work has been critiqued for romanticizing femininity and ignoring structural inequalities, her central insight still resonates: code is not purely rational. It carries metaphors. It has aesthetics. It performs gendered relations.

This insight is crucial when reading algorithmic interfaces in Macao or Singapore today. The droplet-shaped buttons, pastel menus, and curving swipe paths of platforms like Aomi are not just UX trends—they echo a long lineage of feminized machine interaction: soft, servile, sensory.

Conversely, the dark-mode dashboards of finance apps, the progress bars, and the "efficiency metrics" in habit trackers channel a masculinized machine logic: linear, competitive, and extractive.

These scripts are not universal, but they circulate globally—codified into design handbooks, exported through developer kits, and reinforced by market analytics that mistake data traces for desire.

4.2 The Ghost in the Interface: Colonial Hybridity and the Postmodern Dashboard

While gender shapes how interfaces feel and function, colonial traces are also embedded in their design. The digital futures of cities like Macao, Hong Kong, and Singapore were not accidental—they emerged through layers of colonial influence. They were built under colonial grammars—of language, surveillance, commerce, and symbolic control. These grammars may have been localized or hybridized, but they were never fully dismantled.

Homi Bhabha's theory of hybridity offers a lens through which to read this historical residue. Bhabha [10] argued that colonial discourse functions through "ambivalence": it demands the native mimic the colonizer, but never fully become them. This produces a space of slippage, repetition, and partial legibility—a zone Bhabha called the "Third Space."

What happens when we bring this lens to the algorithmic interface?

Take, for example, the Portuguese language fragments that decorate Aomi's home screen. They are largely decorative—"Olá!" or "Bom apetite!"—but they signal a cultural positioning. Portuguese is no longer a medium of governance in Macao; it is now a stylistic signifier of heritage, order, and legitimacy. Its presence on a food delivery app suggests not functionality, but aesthetic coloniality—a gesture toward cosmopolitanism that obscures the deep inequalities that once accompanied its power.

Similarly, GrabPay's ranking badges—"Silver," "Gold," "Platinum"—mimic Western credit systems, but are overlaid with Southeast Asian reward culture logics. These aren't just gamification features for engagement. They belong to a larger visual economy shaped by postcolonial conditions, where aspiration gets expressed through signs of progress, comparison, and the pursuit of moving upward.

Bhabha's ambivalence returns here. These interfaces perform "modernity" by mimicking Western design grammars, but never fully align with them. This design mimicry parallels broader tensions in global communication governance, particularly around racialized media hierarchies [11]. The result is a platform aesthetic that is always almost global, but remains saturated with local anxiety: "Are we modern enough? Are we still legible?"

4.3 Designing for Legibility: Who Gets to Be Read?

Colonial systems were once obsessed with things like mapping and classification—through censuses, police records, schedules. Ruling often just meant making people and places easier to handle. That kind of logic is still very much with us. Platforms today don't "see" users as people; they group them, sort them, score them. It's not just technical—it's political. Scott [12] reminds us that simplifying human life into legible categories has long been a strategy of control. A similar way of thinking appears to guide how algorithms function today. Gender, for example, doesn't remain a lived or shifting experience—it often becomes something abstract, like a tag or a data trace. People aren't just using platforms; they're also being read by them. Someone browsing skincare, posting selfies—she might get sorted as female. These patterns echo what Noble terms "algorithmic oppression" [13], where algorithmic logics reinforce social hierarchies under the appearance of personalization.Another user tracking calories or checking investment tips? Probably flagged male. It's not a fixed rule, but the patterns are there. And they're not passive. Over time, users start to sense what kinds of behaviors "match" their profile, even if they're not fully aware of it. People adjust things—sometimes on purpose, sometimes without really thinking about it. And that kind of response just ends up reinforcing whatever the system already had in mind. It's a loop, one that trains the person as much as the algorithm. Media legitimacy, as discussed by Couldry [14], plays a crucial role in shaping what counts as normal or visible within interface cultures.Platforms don't just show us the world—they guide what seems acceptable inside it.Soft-looking interfaces—light colors, round shapes—often show up in lifestyle or care apps. Sharper edges, dark tones, minimalism—that's what shows up in tools for finance, direction, or control. These aren't neutral design choices. In postcolonial settings, that weight is hard to ignore. There's something familiar about them—familiar in a way that ties back to older patterns of authority and control.What counts as normal here isn't just about usability—it's shaped by history, by memory, by place.

4.4 Toward a Critical Genealogy of Interface Gender

Taken together, these theoretical histories suggest that gendered platform design is never just about gender. It is about how modernity is felt, how colonial residues persist, and how aesthetics become politics.

To read an interface is to enter a dense archive: of labor, affect, aspiration, and hierarchy. The roundness of a button might echo 1950s kitchenware design, which marketed "curves" to housewives. The layout of a finance dashboard might borrow from Cold War-era control panels. The default tone of a chatbot might draw on the historical association of femininity with servility and care.

The point is not to reject all design, but to render visible the scripts beneath the pixels.

This project therefore aligns with a growing strand of scholarship that treats platforms not as new or immaterial, but as continuations of old regimes—repackaged, reskinned, and reanimated in the name of progress.

4.5 Closing Thoughts

This chapter has traced the dual inheritance of algorithmic platforms: their gendered machine history and their colonial aesthetic codes. Neither operates in isolation. Together, they produce a logic of interface governance that feels seamless, intuitive, and efficient—but is, in fact, deeply scripted.

The task of this research is not simply to "decode" these scripts, but to ask: What other scripts are possible? What might a decolonial, degendered interface look like—not just in content, but in form, logic, and interaction?

This is not a purely technical question. It is an imaginative one—and a political one. And it begins with seeing the present not as inevitable, but as inherited.

5. Background and Theoretical Grounding

5.1 Gender as Performativity, Gender as Interface

Following gender is performative—not something one is, but something one does repeatedly—platform environments can be seen as performance stages. But unlike physical spaces, digital platforms come with programmed affordances, recommended scripts, and feedback loops. The "performance" of gender on platforms is thus not only social but infrastructural.

For example, dating apps like Tinder often reward assertiveness in male-coded profiles (short bios, dominant language, fewer emojis), while Instagram influencers are algorithmically rewarded for visually coded femininity: softness, vulnerability, or aesthetic consistency. This division is not accidental—it reflects the data histories on which these platforms are trained, as well as user interaction patterns which are themselves shaped by broader cultural expectations.

5.2 Postcolonial Media Modernity

Cities like Macao, Singapore, and Hong Kong are frequently positioned as "hybrid modernities"—neither entirely Western nor traditionally Eastern, but layered with conflicting narratives of progress, identity, and control. Media in these cities have long acted as intermediaries—negotiating between colonial authority, capitalist expansion, and everyday cultural expression. With platform capitalism, this function doesn't disappear, but changes form. Instead of creating content themselves, platforms manage and rank what already exists, often according to rules that remain

unclear.As Eubanks reminds us [15], such systems often deepen structural inequalities under the guise of optimization and digital access.

What takes shape is a version of media modernity structured through algorithms—driven less by editorial decisions or public institutions, and more by metrics of engagement, predictive sorting, and emotional responsiveness.Within this framework, gender becomes both a filter and an effect—something that algorithms learn from and, in turn, shape.

6. Case Observations: Gendered Platform Aesthetics in Macao and Singapore

6.1 The Femininity of Hospitality Platforms

In Macao, many lifestyle platforms—ranging from food delivery to shopping discovery—exhibit a heavily feminized visual aesthetic. Apps like “Aomi” or “MoShopping” use pastel color schemes, rounded fonts, and illustrations of young women to signify ease, pleasure, and social shareability. Similar visual codes have also been noted in Chinese digital platforms like Kuaishou [16], where aesthetics carry implicit class and gender assumptions. Interface cues like “Treat Yourself” or “Feel Pretty Today” reflect an implicit coding of the consumer-subject as feminine, emotionally responsive, and mobile.

But this is not only about targeting women users. The feminization of UI/UX in this case relates to a broader image of modern urban life. It is leisure-oriented, emotionally expressive, and closely integrated with platform use.To be modern in Macao, according to these interfaces, is to be responsive, soft, and curated—qualities historically feminized in both East and West.

6.2 Masculinity and Control in Financial Tech

In contrast, fintech apps used in Singapore—such as GrabPay, OCBC OneWealth, or cryptocurrency dashboards—tend to perform a very different kind of masculinity. These platforms highlight control, performance, and competition. Their color schemes tend to be darker. Typography is sharper. Affordances often include dashboards, analytics, and features that resemble leaderboards. The user is interpellated as a rational subject—one expected to manage risk and assert agency in goal-driven, high-stakes settings.

Interestingly, while these apps are not gender-exclusive, their design logic implicitly codes users as “masculine”—not necessarily male, but rational, strategic, and progress-driven. The femininity of these platforms appears only in secondary features: lifestyle perks, design “skins,” or occasional emotive marketing campaigns.

6.3 The Gender-Neutral Myth of Smart Assistants

Across both cities, the popularity of AI voice assistants—such as Siri, Google Assistant, and region-specific versions like Xiaodu—reveals another layer of complexity.Although often marketed as neutral, these assistants tend to carry gendered traits. They speak in female voices, sound compliant, and offer emotional support.This aligns with Cherry’s critique of invisible digital labor and feminized service roles in contemporary tech [17]. This default isn’t just a technical decision. It reflects broader cultural norms tied to labor, service, and care.

In postcolonial cities, these patterns raise familiar concerns: Who serves whom in the algorithmic future? Why is the “ideal” interface feminized, while the logic behind it remains masculinized—rational, extractive, coded in opaque languages? These dynamics are not accidental. They point to infrastructural hierarchies that echo colonial systems of control and visibility.

7. Toward Algorithmic Accountability and Situated Design

To critique is not merely to unveil. At some point, critique must fold back into design—into the possibilities of doing otherwise. The question, then, is no longer just: how do platforms reproduce gendered and colonial codes? It becomes: what might intervene? what might be reimagined?

This chapter turns toward design politics and practical resistance. Without claiming to offer a blueprint, it maps some of the emerging efforts, speculative ideas, and institutional gaps in making platforms more accountable—especially in postcolonial, multilingual, and gender-diverse contexts. These strategies range from grassroots tools to alternative interface proposals and ethical design principles.

The stakes are not minor. As platform logics increasingly shape urban life, identity recognition, and affective behavior, failing to intervene means reproducing exclusions at scale.

7.1 Between Opacity and Oversimplification: What Accountability Means

Accountability in algorithmic systems often collapses into two unsatisfying choices:

1. Technical transparency—e.g., disclosing how models work, what data they use.

2. User consent—e.g., privacy policies, opt-ins, gender toggles.

Both are limited. Technical transparency is rarely legible to ordinary users, and often conceals more than it reveals. User consent, meanwhile, assumes meaningful choice where there is often only design coercion.

In the context of gendered platform logic, accountability must move beyond formal audits. It must ask:

Who defines the categories through which we are sorted?

What norms are embedded in UX grammars and interface language?

Whose values shape the default?

In short, we need what Sasha Costanza-Chock calls a "design justice" orientation—one that sees interface not as neutral but as a site of power, memory, and contestation.

7.2 Subversive Design Practices: Imagined Interventions

While large-scale platforms often obscure their design logics behind seamless interfaces and algorithmic opacity, counter-design thinking invites us to imagine how visual resistance, affective re-coding, and symbolic disruption might operate at the margins.The following design sketches were developed as part of this study to explore these possibilities in a speculative and situated way. This section offers a set of conceptual design sketches—not yet implemented, but framed as design activism through thought experiments. These sketches reflect a desire to unsettle the defaults of gendered interface scripting and explore the edges of usability, language, and perception.One example envisions a lightweight browser plugin that deliberately resists soft-scripted interface cues in everyday apps.

One such speculative prototype is a browser-side counter-interface tool conceptualized as the "Aomi Unsweetened Plugin." Designed during this research as a design activism exercise, the imagined plugin would strip soft color palettes, rounded UI elements, and flower-petal animations from a popular food delivery app. It would replace them with grayscale layouts, minimalist typography, and neutral affordances.Yet design resistance does not have to be visual. Many speculative experiments imagine cultural shifts through interactional reorientation or micro-level disruptions. Though not implemented, this visual intervention proposes a way of "unscripting" the emotional aesthetics of gendered platforms—reclaiming cognitive attention from scripted delight toward ambient neutrality.

Beyond visual design, imagined cultural interventions may also target platform logics in subtler ways. For example, queer design imaginaries in Southeast Asia often experiment with reframing interactional inputs: what if dating apps asked not who you are, but how you want to relate today? Such reorientation resists the classification imperative and invites non-linear matching, even if only theorized in art-school prompts or design forums.These minor shifts in interface questions hint at broader possibilities for rethinking platform norms through language, gesture, and semiotic interference.

Similarly, in multilingual digital spaces, one can imagine light interventions that replace hyper-targeted ads with user-inserted texts: Cantonese proverbs, nonsense verse, or poetic fragments that evade machine capture.These proposals, while not realized in code or commerce, highlight an imagination that refuses passive consumption and linear functionality. These symbolic gestures may never enter the formal toolkit of software production—but they gesture toward a critical imagination of design, where refusal, slowness, and ambiguity become tools of interface resistance.Whether embedded in text or interface gesture, these speculative tactics open up small cracks in the otherwise seamless user experience.

While these interventions remain speculative, they reflect an approach that treats design not only as a functional concern, but as a cultural and political terrain.This speculative lens is not merely academic; it offers concrete ways to reframe the everyday. Small acts of design imagination—whether a gesture in interface flow or a rewritten prompt—can open subtle but powerful cracks in normative systems.To imagine differently is already to intervene.

7.3 Speculative Alternatives: What Could Be Designed Differently?

Rather than simply deconstruct what exists, it is equally important to imagine what does not yet. Drawing from speculative design and feminist HCI, this section proposes three tentative principles for rethinking gender and coloniality in algorithmic platforms:

7.3.1 Aesthetic Plurality over Brand Uniformity

Most platforms prioritize consistent aesthetics—clean, controlled, brand-aligned. But gender expression is messy, shifting, context-dependent.

What if platforms allowed users to design their own interface affect? Not merely choosing light or dark mode, but selecting tonalities: warm, sharp, ambivalent, surreal. Such customization would not be a vanity feature but a way of disrupting aesthetic normativity.

7.3.2 Sensible Defaults, Not Invisible Biases

Platforms often embed gendered assumptions in defaults—voice assistants with female voices, pink layouts for caregiving apps, ranking systems in finance tools.

Instead of defaulting to the majority or "market-optimized" design, platforms could default to ambiguity or modifiability. Every default should explain itself, and offer exit ramps. A button might say: "We designed this layout for ease, but you can challenge us."

This is not pure relativism. It is a situated ethics of UI/UX, acknowledging that design choices are not neutral and must be narratable.

7.3.3 Algorithmic Translation Layers

Rather than personalizing for users, what if platforms offered translation tools between algorithmic languages and user languages?

A user could ask: "Why am I seeing this?" and get an answer not in code logic, but in metaphor, narrative, or counterfactual comparison. Something like: "We think you're anxious today. But here's how the app would look if we thought you were bored."

Such speculative translation would not eliminate algorithmic bias—but it would make its world-making power visible and discussable.

7.4 Institutional Barriers and Governance Gaps

Of course, no amount of critical design can substitute for institutional accountability. Most platforms are governed by market logic, not ethical commitments.This disconnect between digital infrastructure and sustainability ethics has also been explored in information systems research [18]. And most design teams are homogeneous in terms of race, class, and gender—especially in Asian startup ecosystems, where Western UX standards are mimicked and glorified.

What's missing is not just regulation but cultural critique embedded within development workflows. UX designers should be trained not only in usability but in postcolonial theory, affect studies, and linguistic variation. Internal diversity reports should track not only hiring but whose aesthetic sensibilities dominate the interface.

Public institutions—city governments, media authorities, tech ministries—must also play a role. They could fund speculative design labs, support multilingual tech communities, or mandate pluralist interface audits for major platforms.

Otherwise, platform modernity becomes a new empire: elegant, responsive, and invisibly exclusive.

7.5 Accountability Without Perfection

Finally, this chapter ends with a caution. To demand accountability does not mean demanding purity. No design will be perfect. No platform will be free of power.

But accountability can begin in the small:

A button that admits its intention.

A layout that refuses easy gendering.

A prompt that acknowledges user uncertainty, rather than correcting it.

These gestures may not dismantle platform capitalism. But they reintroduce ambivalence into the system—a space where users can hesitate, wonder, or opt out. And in that space, new forms of legibility—and refusal—can begin.

Next chapter will draw these threads together—history, interface, design, and desire—to reflect on what it means to imagine otherwise, and why that matters in the spaces we click, scroll, and live through each day.

8. Conclusion: Imagining Otherwise

In imagining alternatives, this research gestures toward design paradigms that support behavioral multiplicity, ethical ambiguity, and sustainable interface cultures—particularly within multilingual, postcolonial cities navigating digital futures on their own terms.

From a practical standpoint, the study suggests that gender-aware platform design, inclusive interface defaults, and locally contextualized algorithmic moderation can promote not only cultural sustainability but also behavioral equity. These insights may support educators, developers, and platform regulators in constructing media systems that sustain pluralism rather than streamline it.

There is a strange comfort in the seamless interface. It tells us the world is coherent, navigable, perhaps even fair—if only we click the right buttons. In that comfort lies the risk: of forgetting how platforms are built, whose worldviews they encode, and who gets shaped in their image.

This project began with a simple observation: that algorithmic systems in postcolonial cities do not treat all users equally. Some are feminized. Some are streamlined. Some are rewarded for being legible. Others are nudged, softened, or erased. The logics of gender and coloniality are not outside the app—they are in the interface. They breathe through colors, gestures, defaults, and delays.

But the goal was never just to name the problem. It was also to ask: how else might this feel? What would a platform look like if it didn't begin by asking, "Who are you?"—but rather, "Who might you become today?"

To imagine otherwise is not to pretend we are beyond infrastructure. It is to remember that infrastructure is also imagined. Every notification, every sound cue, every swipe behavior was designed by someone, somewhere, with some idea of the user in mind.

And that imagined user still looks remarkably consistent across platforms: decisive, efficient, emotionally predictable, bilingual in the "right" languages, ideally monetizable. Often, this user is implicitly male-coded in logic, and female-coded in service. And in many postcolonial interfaces, this user is also quietly loyal to modernity's aspirations: to be global, to be orderly, to be "future-ready."

But what about the user who is messy? Who feels in three languages but types in none? Who doesn't know what they want until they see it, and then wishes they hadn't?

These are not user personas in UX workshops. But they are real. They exist in the overlooked scrolls, the unclicked menus, the accidentally closed windows. They resist legibility not out of protest, but because life isn't always parseable.

8.1 A Reminder, Not a Resolution

This work does not end in a grand solution. There is no single interface that will solve the deep entanglements of gender, culture, and colonial desire. There is no ethical toggle in settings that will undo years of coded assumptions. And there is no critical theory that makes us immune to being interpolated.

What there is—what this research hopes to offer—is a shift in how we look. A refusal to see platforms as mirrors, and a commitment to seeing them as architectures. We don't need to blame the UI for everything. But we do need to notice when the UI isn't neutral.

We need to ask why the same interface feels warm to some and infantilizing to others. Why personalization feels liberating in one app and deeply scripted in another. Why design trends so often echo histories of domination under the guise of delight.

We also need to remember that critique is not cynicism. To critique is to care enough to notice. To study design as history. To trace layout as ideology. And to believe that there are still choices to be made, even in the most automatic flows.

8.2 An Open End

There are many things this project could not cover: the labor behind algorithmic training, the environmental costs of interface optimization, the role of sound design in gender scripting, or how migration patterns affect recommendation systems. These are not failures of scope. They are reminders that the platform is not a finished object—it is a moving terrain, and so must be our questions.

What matters is that we keep asking them.

In Macao, Singapore, and Hong Kong—cities with fractured pasts and uncertain futures—these questions are not academic luxuries. They are civic urgencies. The ways we scroll, speak, translate, and appear are increasingly brokered by systems we did not vote for but now live inside. These systems do not have to be hostile to ambiguity, hybridity, or refusal. But they will be—unless we insist otherwise.

That insistence may begin small: in a refusal to complete a gender field. In a design workshop that centers poetic ambiguity instead of user clarity. In a research project, like this one, that treats interface as theory, and theory as practice.

It's not much. But it's a start.

References

[1] Wajcman, J. (2000). Reflections on gender and technology studies: In what state is the art?. Social studies of science, 30(3), 447-464. https://doi.org/10.1177/030631200030003005

[2] Wajcman, J., & Young, E. (2023). Feminism confronts AI. Feminist AI: Critical perspectives on algorithms, data, and intelligent machines, 47.

[3] West, S. M. (2020). Redistribution and rekognition: A feminist critique of algorithmic fairness. Catalyst: Feminism, Theory, Technoscience, 6(2). https://doi.org/10.28968/cftt.v6i2.33043

[4] Costanza-Chock, S. (2018). Design justice: Towards an intersectional feminist framework for design theory and practice. https://doi.org/10.21606/drs.2018.679

[5] Sundaram, R. (2009). Pirate modernity: Delhi's media urbanism. Routledge. https://doi.org/10.4324/9780203875421

[6] Udupa, S., & Dattatreyan, E. G. (2023). Digital unsettling: Decoloniality and dispossession in the age of social media. New York University Press.

[7] Gillespie, T. (2010). The politics of 'platforms'. New media & society, 12(3), 347-364. https://doi.org/10.1177/1461444809342738

[8] Zuboff, S. (2019, January). Surveillance capitalism and the challenge of collective action. In New labor forum (Vol. 28, No. 1, pp. 10-29). Sage CA: Los Angeles, CA: Sage Publications. https://doi.org/10.1177/1095796018819461
[9] Plant, S. (1997). Zeros and ones: Digital women and the new technoculture (Vol. 4). London.
[10] Bhabha, H. K. (2012). The location of culture. routledge.
[11] Chakravartty, P., & Muller, C. (2024). Anticolonial world-making: racial justice and global communication governance. In Handbook of Media and Communication Governance (pp. 189-199). Edward Elgar Publishing. https://doi.org/10.4337/9781800887206.00024
[12] Scott, J. C. (2020). Seeing like a state: How certain schemes to improve the human condition have failed. yale university Press.
[13] Maragh-Lloyd, R. (2020). Safiya Umoja Noble, Algorithms of oppression. https://doi.org/10.1177/0196859919858718
[14] Couldry, N. (2015). Listening beyond the echoes: Media, ethics, and agency in an uncertain world. Routledge.
[15] Eubanks, V. (2012). Digital dead end: Fighting for social justice in the information age. MIt Press.
[16] Lin, J., & de Kloet, J. (2019). Platformization of the unlikely creative class: Kuaishou and Chinese digital cultural production. Social Media+ Society, 5(4), 2056305119883430. https://doi.org/10.1177/2056305119883430
[17] Cherry, M. A. (2016). Virtual work and invisible labor. Invisible labor: Hidden work in the contemporary world, 71-86.
[18] Kotlarsky, J., Oshri, I., & Sekulic, N. (2023). Digital sustainability in information systems research: Conceptual foundations and future directions. Journal of the Association for Information Systems, 24(4), 936-952. https://aisel.aisnet.org/jais/vol24/iss4/9