

Book Review | *Microbial Resolution: Visualization and Security in the War Against Emerging Microbes*, by Gloria Chan-Sook Kim (University of Minnesota Press, 2024)

Jih-Fei Cheng
Scripps College
jcheng@scrippscollege.edu

“You academics don’t get it. It’s about *scale*,” a former comrade told me in 2014 when I questioned whether vesting hope in pharmaceuticals would end the HIV/AIDS pandemic. We met in the early 2000s while organizing among unhoused queer and trans youth of color in New York City. I was working at the time in community-based HIV/AIDS prevention programs and research. Reuniting nearly a decade later, in 2014, while I was in graduate school, I asked his impression of the US Federal Drug Administration’s recent approval of Truvada in 2012 as the first effective HIV pre-exposure prophylactic (PrEP) for market distribution. I was skeptical about PrEP’s global reach since HIV antiretrovirals pioneered as early as the mid-1990s still remained out of reach for many Global South communities due to patents, costs, and trade wars. My former comrade was in the throes of biotechnological optimism.

Gloria Chan-Sook Kim’s monograph *Microbial Resolution: Visualization and Security in the War Against Emerging Microbes* reflects on pandemic emergence another ten years later when COVID-19 has also become endemic and chronically managed by biotechnologies pioneered by the Global North and persistently denied to the Global South. *Microbial Resolution* charts the “post-Cold War period” of 1989 to 2016 in which microbes became re-envisioned as the new frontier for US imperial wars (1). The analysis offers a sobering antidote to biotechnological optimism. It directs our critical analyses to address why we are so deeply invested in the capacity of biotechnological innovation. As Kim argues, the field of “emerging microbes” continuously projects tales of caution about a ruinous

Cheng, Jih-Fei. 2025. Review of *Microbial Resolution: Visualization and Security in the War Against Emerging Microbes* (University of Minnesota Press, 2024). *Catalyst: Feminism, Theory, Technoscience* 11 (2): 1–5.

<http://www.catalystjournal.org> | ISSN: 2380-3312.

© Jih-Fei Cheng, 2025 | Licensed to the Catalyst Project under a Creative Commons Attribution Non-Commercial No Derivatives license

future, making it a constant source for crises, while manufacturing endless opportunities for biotechnological innovation and profit.

It feels important to state: Writing something pithy and incisive about COVID-19 amid its crisis reverberation and our individually experienced and collectively embodied “brain fog” is a task I had not imagined surmountable prior to reading *Microbial Resolution*. Although the book’s historical framing ends in 2016 (for reasons left unexplained), Kim writes from the ambit of the COVID-19 pandemic and effectively persuades the reader to consider the implications of her analyses for our present. *Microbial Resolution* makes the “unimaginable” its object of analysis in studying emerging disease preparedness in the late twentieth and early twenty-first centuries. Bringing this period into intensified focus, the monograph maps the media ecology of what Kim calls “preemptive biopreparedness” (14–15).

Kim’s use of the term *microbial resolution* entwines two dimensions of preemptive biopreparedness: the “discursive processes and visualization practices in the U.S.-led war against emerging microbes” and the act of “solving” the “problem” of an “ill-formed entity (such as a diffuse threat)” by bringing it “into shape” (5). “Emergence” is the operative term for Kim; it strains our perception of what is “unimaginable.” The term *emergence* marks for Kim the transfer of US–USSR geopolitical rivalry in the twentieth century to the World Health Organization’s new battlefield announced in 1989 against emerging infectious diseases with the United States pointing the way. “Emerging microbes” conceptually refuses the binary between what is seeable/knowable and invisible/unknowable by bringing it into resolution. As Kim’s object of study, the notion draws together Marita Sturken’s (1997) analysis of the “tangled memories” of US failures in its wars against Vietnam and HIV/AIDS and Cindy Patton’s (2002) framework for “globalizing AIDS.”

To bring an emerging infectious disease into microbial resolution, then, requires abundant data to render a “calculative imaginary” that is presumably capable of detecting microbial movement to thwart mutant formations (Kim 2024, 97). Examining data visualizations of microbial ecologies, animal sentinel media, corporate films, policy documents, grey literature, and more, *Microbial Resolution* explores the way “emergence” names the property of “proliferating and ever-mutating entities” who, by definition, remain not simply “unknown, but *nonknowable*” (13). Importantly, Kim notes, the threat must seem visible but never discernible. Therein lies the paradox of preemptive biopreparedness: How can one see the potential existence of a microbial threat? The “task is not to convert the nonknowable into something that can be cognitively grasped,” Kim declares, “rather, [resolution] operates to make the hazy frontiers and limitless dangers of microbial emergence into a productive and operable object” (13–14). Kim maintains that there is no finite resolution to the war against microbes—only “*irresolution* lies at the heart of the war against microbial emergence”—like a pixel

remains an index of imperceptibility despite innovations in technological mediation (23). Put simply, irresolution is the crisis condition of the war against emerging microbes.

Kim's examination of US-led global health initiatives against emerging microbes demonstrates how the "unimaginable" has been rendered governable through a media ecology that proliferates the techniques for sourcing data and visualizing the potential threat of a disease presumably even before it comes into existence. To this end, *Microbial Resolution* contends, "war" is not a mere metaphor; it expresses how "managing microbial emergence and preempting terror share the same project of strategic imagination. Both make foresight, fashioning it out of the capacities of a militarized imagination on the offense in a war game with high stakes" (104). Like the US War on Terror multiplies its "enemies" for endless expansion, the US war against emerging microbes makes imperceptibility and irresolution the "most potent effects of the concept of emergence: the novelty of emerging microbes—their potential to appear anywhere, at any time, in unending new genetic combinations—promises boundless economic production founded on the possibility of perpetually infected futures" (149).

Although *Microbial Resolution* does not explicitly employ racial, gender, or sexual analyses, it makes clear that US colonialism and military imperialism are foundational to the informational infrastructures, or "bioinformation," for surveilling microbial emergence (122–25). In the post–Cold War/War on Terror era, the United States has engaged in "pathogenic nation making," Kim claims (27–31). Building on Priscilla Wald's (2008) notion of "imagined immunities," US "pathogenic nation making" involves inciting "measures and policies of preparedness and preemption [that] immerse us in speculative scenarios of ruined futures" (Kim 2024, 15). These "risk technologies," Kim writes, "work on the premise that data's blank field points to the incipient contours of the future rather than what is already known and processed. They succeed even in—or perhaps because of—their failure to arrive at an account of something that can crystallize and become determinant, and without ever seeking to confront that aporia" (106). In other words, mapping numbers and visualizations of microbial emergence as the horizon of the future consigns us to endless scenarios of risk that require biotechnological intervention and management. Our imaginations are filled with risk that can only be attended to by biotechnological governance.

Kim reminds us, whether discussing HIV/AIDS or COVID-19, US and Global North biotechnology corporations have invested in protecting patents for profits instead of distributing biotechnologies worldwide to save lives. The signing of the 1994 Trade-Related Aspect of Intellectual Property Agreement, for instance, guaranteed that the Global South would remain a site for bioinformation extraction while guaranteeing the Global North as the beneficiaries of biotechnological innovation and production (136–37). *Microbial Resolution*

elucidates why the logistics of industrial scale for biotechnologies, like PrEP, demands the abstraction of information—that is, “raw data” (94), or what Stuart Hall might call the “facts *and* interpretations” of the “raw materials” used to reproduce through media the dominant ideologies driving a proclaimed crisis (1978, 60). Raw data quantifies and materializes bioinformation as a resource for a calculative imaginary. Information abstraction ultimately leads to informational failures, or aporias of scientific visualization. These aporias, Kim submits, regenerate crises conditions that insist on maintaining biotechnological innovation, patenting, and production using supply chains that extract from the Global South to feed Global North consumption and financial accumulation.

Microbial Resolution is a book that undergraduates and graduates alike will find challenging yet accessible as a history of the present. The reasoning for the historical periodization of the monograph remains light on details. A discussion of how infrastructures of bioinformation can be traced to social and biological reproductive labor (Posocco 2022), or Indigenous dispossession and ecological devastation (Reardon and TallBear 2012; Mameni 2023), would make for compelling intersectional analyses of science and technology. However, in an era in which disinformation, social media, and media campaigns against “emerging microbes” and “terror” throw truth into constant crises, *Microbial Resolution* teaches us important visual methodologies to discern biotechnological mediation. Although biotechnologies promise us progressive clarity towards a solution, they ultimately involve industries and innovations of US military imperialism that traffic in crises to redistribute wealth, health, and power upwards.

References

- Hall, Stuart. 1978. *Policing the Crisis: Mugging, the State, and Law and Order*. Macmillan Press.
- Kim, Gloria Chan-Sook. 2024. *Microbial Resolution: Visualization and Security in the War Against Emerging Microbes*. University of Minnesota Press.
- Mameni, Salar. 2023. *Terracene: A Crude Aesthetics*. Duke University Press.
- Patton, Cindy. 2002. *Globalizing AIDS*. University of Minnesota Press.
- Posocco, Silvia. 2022. “Harvesting Life, Mining Death: Adoption, Surrogacy and Forensics across Borders.” *Catalyst: Feminism, Theory, Technoscience* 8 (1). <https://doi.org/10.28968/cftt.v8i1.35071>.
- Reardon, Jenny, and Kim TallBear. 2012. “‘Your DNA Is Our History’: Genomics, Anthropology, and the Construction of Whiteness as Property.” *Current Anthropology* 53 (S5): S233–45. <https://doi.org/10.1086/662629>.
- Sturken, Marita. 1997. *Tangled Memories: The Vietnam War, the AIDS Epidemic, and the Politics of Remembering*. University of California Press.

Wald, Priscilla. 2008. *Contagious: Cultures, Carriers, and the Outbreak Narrative*. Duke University Press.

Author Bio

Jih-Fei Cheng (any pronoun) is associate professor of feminist, gender, and sexuality studies at Scripps College. Cheng is currently completing a book-length manuscript, tentatively titled "Materialist Virology," which historicizes the field of virology in the context of racial capitalism, plantation agriculture, industrialization, and financialization.