

Speculating on the Terms of “Small, Foreign, and Female”: Reimagining the Temporality of
Technology Through Asian American Cultural Production

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Abstract

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My dissertation examines the ways in which technology is associated with progress, often understood in terms of a future with limitless opportunities for communication, commerce, and innovation. This version of progress insists on a disavowal of technology’s Cold War origins and its dependence on a militarized political economy. I center the gendered and racialized formation of the “small, foreign, and female”—a phrase that researcher Karen Hossfeld heard in an interview with a hiring manager in a Silicon Valley microchip manufacturing firm, explaining his ideal assembly line worker—to think about how this form of embodiment allows us to engage with an alternate phenomenology of militarized migration and labor in Asian American cultural production that resists through speculation. While scholarship exists that engages techno-orientalism, the history of technology, and the conditions of women in technology’s global factory, little scholarship has been produced that reads Asian American cultural

production against artifacts that drive a technological narrative of temporal progress. My feminist intervention in techno-orientalism troubles the ways in which technology has speculated on Asian women's bodies in different spaces, revealing racialization as a technology itself that relies on a series of disavowals around progress and futurity. I employ the speculative mode in its capacity to materialize the "unreal" in moving the reader away from accepted knowledges and understandings of time. Through speculation, my dissertation examines how futurity gets narrated in terms of technology's political economy by questioning what futures become material realities and which don't. The speculative desires and visions of women of color as phenomenologically experienced think not only through the question of "what if" but also "what new formations might be."

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INTRODUCTION

Reimagining and Repositioning the Speculative Possibilities of Small, Foreign, and Female

Larissa Lai's novel *Salt Fish Girl* begins with the myth of Nu Wa, the snake-person who created humanity by molding them from the mud along the riverbank. The story alternates perspectives between Nu Wa and Miranda—Nu Wa's reincarnation living in 2044, birthed after her mother eats the durian that contains Nu Wa. Miranda's story takes place in an urban metropolis on the North American west coast, where corporations like the sneaker company "Pallas" control genetically modified clone bodies called "Sonias" for factory labor. The story later follows the Sonias as they begin a revolution against the intense bodily surveillance of the state. When I started graduate school and initially read *Salt Fish Girl*, I gravitated toward elements of the story specifically related to technology's gendered and racialized manufacturing labor, the many human/non-human forms of Nu Wa, and the trauma of war that makes itself palpable in the "dreaming disease" that Miranda comes down with. These initial readings were what guided my larger project—one that sought to think about the ways in which technology's political economy speculatively racializes and genders Asian women through narratives of a techno-oriental future, a posthuman and postracial bodily form, and a simultaneous insistence on their invisibility in production and manufacturing. After sitting with these threads and thinking about how the novel and the course of the dissertation project has tied to my own narrative, I return and seem to be more fixated on the section of Lai's novel that tells the story of Nu Wa.

One of Nu Wa's early human incarnations is a girl living in late 19th century South China, where she falls in love with the Salt Fish Girl, a dried fish merchant on the docks of her village. Nu Wa seeks to avoid marriage, deciding upon spinsterhood in her first move to escape

and run away from her home. Nu Wa's mother's feelings were mixed in a way that "only a married woman can be, seeing that her daughter has escaped what she could not" (Lai 54). As Salt Fish Girl's father disapproves of their relationship and the queering of the patriarchal family structure,¹ Nu Wa and Salt Fish Girl decide to run away together to Canton. It is this act of running, of moving between places, of being racialized and gendered by space and time that keeps compelling me.

The Salt Fish Girl begins working in factories that produce tin animal toys, where a mass of women file in and out of the factory doors at all times of day. When Nu Wa initially sees the Salt Fish Girl working in the factory—first forced to work there by a man targeting migrant women—and tells Nu Wa to run. Nevertheless, Nu Wa stays in Canton and notices the changes that happen to the Salt Fish Girl's body—her form changing as her eyes grow dimmer and begin to deteriorate rapidly. Nu Wa notices all of the older women working are "nearly blind, wasting away in the dark corners of the factory mixing the colours and wheezing in reaction to the bright, powdery, dry chemical form of the dyes" (Lai 118). The Salt Fish Girl's eyesight now needs to be supported by spectacles "that had been discarded by some rich but charitable person in America" (Lai 121). As Salt Fish Girl's body begins to change, the different types of labor

¹ In *Impossible Desires*, Gayatri Gopinath argues that queer female diasporic subjectivity, mobilizes questions of time and place. By centering female subjectivity, diaspora is conceptualized in "ways that do not invariably replicate heteronormative and patriarchal structures of kinship and community" (6). See Gopinath, Gayatri. *Impossible Desires: Queer Diasporas and South Asian Public Cultures*. Duke University Press, 2005.

required of her alter the dynamics of their relationship. Nu Wa is upset that Salt Fish Girl stays in this work. However, after having abandoned their families, Salt Fish Girl asks, “why fall further than necessary?” (Lai 119). Nu Wa retorts that despite having fallen, all of the falling has already been done, ““there is not further”” (Lai 119). For Nu Wa, not running is never an option and continuous movement toward something else is a necessity in the creation of new forms of survival.

However, one day Nu Wa meets a foreign woman named Edwina. Edwina whose white paleness is described as translucence, takes her through the clouds that appear on the water to a landmass formed behind the mist. They arrive at the city of Hope on the Island of Mist and Forgetfulness where archways on the east and west inscribe the words “progress” and “democracy” over the city. Nu Wa is taken into a world where Asian women’s bodies are easily exploitable, where the question of “why shed blood when people can be sold so easily?” (141) is what pushes forth the colonial enterprise. The Island, through its English and French colonial history, “became unmoored from history, lost its connection with the past or the future, and floated into the sky” (Lai 139). As Nu Wa enters this world, it becomes clear that her movement toward the Island wasn’t one of running, or of chosen movement, but one of coercion. She narrates her experience being taken by Edwina as one that she could have wrenched herself free of, if she had truly wanted to, but still wasn’t able, as though a sleepiness or floating state guided her and took over her ability to run. On Nu Wa’s arrival, accepting a special drink makes her language gush away. Taking gulps provides her with an ease of the new language’s pronunciation, as memories of her old language and life slip away. As Nu Wa moves through the island, her labor is exploitable due to her undocumented status. The threat of deportation allows a hotel keeper and an extortion lottery “start-up” to use her labor as she lives and exists in the

flows of the city with other Asian sex trade workers and migrant laborers, unable to navigate the system or become socioeconomically mobile. Ultimately, she becomes the scapegoat in Edwina's drug smuggling where she is soon sent to prison and incarcerated in the system for years. On leaving prison, she decides to immediately return to Canton. Nu Wa reflects on her departure, on her coercion rather than running, blaming Edwina for taking her "away from my home and from the natural course of my life, no matter how troubled and impoverished it had been" (Lai 143). This natural course of Nu Wa's life, one that is propelled forward through moments of running, moving between space and generations, is interjected with the violence placed upon her body on the Island of Mist and Forgetfulness. The labor that Nu Wa and Salt Fish Girl must survive creates new forms of knowledge and kinship from the racial and gendered forms placed upon their bodies. I focus on this act of running throughout my dissertation in order to draw attention to movement and the ways in which Asian women in the political economy get caught up in the flows of capital yet find ways to move and extend possibilities for themselves and others within its currents.

I begin with this lengthy reading of *Salt Fish Girl*, because it introduces the three driving inquiries of my dissertation and parallels some of my own journey with this project. The first question that started my inquiry was simply, why women of color in the global factory? It's important that the intergenerational story of Nu Wa takes place and moves toward a larger context of technology's post-capitalist political economy. The memory her body feels of being gendered and racialized across time, remembering all these different selves to eventually be embodied as Miranda, is essential to the question of how Asian women get caught in these flows. In Karen Hossfeld's investigation into the "simple formula" for hiring immigrant women for Silicon Valley's high-tech semiconductor manufacturing work, she interviews a white, male

production manager who rationalizes this disproportionate demographic by stating that the three things he looks for in hiring are “small, foreign, and female” (Hossfeld 65). According to this capital logic, immigrant women are grateful to be hired—racialized and gendered as undeserving of other jobs, rationalized as being able to work for less, controlled through a logic that sees immigrant women as desperate for work, exploited for being newly proletarianized, and systematically devalued. In this embodied formation, Asian women’s bodies are dehumanized and made into technology themselves, seen as a more easily exploitable, natural continuation of the manufacturing process. However, Nu Wa’s embodied reincarnations, the human and nonhuman forms her body takes across times, carry with it their own knowledge for what it means to live these different selves outside of liberal personhood. Rather than insist on subjecthood and agency for the small, foreign, and female that has not been granted agency, my reading of Nu Wa suggests that the act of running and moving between time and space puts forth a version of the small, foreign, and female that exists expansively.

When Nu Wa returns to Canton, she finds the Salt Fish Girl and can no longer remember the words to communicate with her in their native tongue. She finds in the fifty years that passed, the Salt Fish Girl is now old and gray and Nu Wa has barely aged. Labor specifically—factory work in Canton and migrant labor on the Island—come to separate the bonds that form between the two women. Their bodies changed and altered by their ability to move through space, something lost between the two from the experience of their bodies as Asian women in the global economy. This brings me to my second inquiry and interest in this project to read speculatively, to resist temporality as progress in technology’s narrative of futurity. As José Esteban Muñoz defines queer temporality in relation to the future, queerness allows one to see beyond the confines of the present. Something that propels one forward, “queerness is that thing

that lets us feel that this world is not enough, that indeed something is missing...Queerness is essentially about the rejection of a here and now and an insistence on potentiality or concrete possibility for another world” (Muñoz 1). This desire to feel beyond the present becomes an affective feeling and mode of traversing and experiencing the present, while always engaging in imagining, creating, and expanding utopia. In Muñoz’s mode of queer temporality, how can the formation of small, foreign, and female read against the narrative that technology seeks to narrate in defining the present and future as an open-ended frontier for new possibility, progress, and technological determinism? What other forms of speculative temporality can we be propelled toward and begin to feel by reading Asian women’s cultural production that seeks to think about time made invisible, not accounted for, or violently erased?

There is another story that runs parallel and aligns with my reading of Lai’s *Salt Fish Girl*, which leads to my final point of inquiry. In the last few weeks of my halmoni’s (grandmother) life, she asked my mom to write down her life story—something that many of us had little knowledge of. My mom wrote down what was recounted in a document called “Mymother.” In the narrative, my halmoni starts by stating that her Korean birthday is 12-16-38, but that in her citizenship papers and immigration documents to the United States, it’s legally listed as 1-21-39. She talks briefly about growing up during the Korean War and under Japanese occupation, talking about the suffering and fondness of growing up in the rural countryside simultaneously. However, the driving story through the narrative, like *Nu Wa*, are the moments of running. At 19, she was placed in an arranged marriage and sent to a family far away to labor on their farm and home. A mother-in-law and son who physically abused her pushed her to run away by foot in the middle of the night back to her home. Upon arriving home, her older brother beat her for running away and immediately returned her back. After two more years of abuse, she

finally had the opportunity to run away again while doing laundry along the river. She took off and found shelter and work as a housekeeper in another village. There the work was hard, and the son of her employer would come into her room and repeatedly rape her. Again, she quit and ran away to another town where she found work at a tavern near the army base, where she was asked to be a waitress and sex worker. She formed a close friendship with another woman working there, who also wanted to seek other employment, and again they left, this time together. This next run brought my halmoni and her friend to work as housekeepers. There, she finally found a place where the work was lighter, and she was allowed more time to “just exist,” as she states. After meeting my grandfather and moving to another new life in a rural village in South Korea, and after having my mother, aunts, and uncle—she eventually came to America in 1977. This immigration was made possible by the 1965 Immigration Act and the chain of sponsorship by my great Aunt who married an American military man—herself sponsored originally by another great Aunt who was adopted by a G.I. during the Korean War. My grandmother doesn't describe this act of movement as running, but rather simply “coming” to America. Despite this, her time in America was some of the time she suffered the most. She worked in sweatshops, did piece meal production at home, worked in a laundromat, and operated a 24-hour deli. The trials and tribulations of her labor and racialized and gendered embodiment in the United States were what my family sees as killing her. She died young of untreated hepatitis in a healthcare system that wouldn't acknowledge her body in pain.

My mother concludes the document by stating that halmoni's life seems so far away like another century. The world she grew up in and the world she came to in America being so different not only culturally, but also time wise, framing temporality in terms of my halmoni living 200 years of life in only 59. The parallels in my halmoni's story and Nu Wa exist in the

bonds she forms with other women on her journey and the way she runs from place to place, not necessarily for “better” opportunities but for new ways to survive without being over determined by socially constructed subject formations. Amidst the turbulence, halmoni found ways to exist within a hostile, militarized, capitalist economy, like Nu Wa’s responses to violence. The experience of coming to America, not as an act of running but as a coercion toward “better” opportunity or “progress,” is narrated like Nu Wa’s dreamlike floating toward the Island of Mist and Forgetfulness. And finally, my mother’s conclusion about time in America and the world my halmoni came from, not in terms of backward or forward development or culture, but rather the 200 years of life contained within 59 years—hauntingly echoes Nu Wa’s return to Canton, only to find fifty years passed in the many lives she had since lived. This understanding of time, rather than an Asian American model minority myth that sees migration as progress toward better opportunity or a Western developmental future, understands temporality in terms of the many lives contained as cyclical and expansive beyond linearity.

This second reading brings me to the point of inquiry, which is the driving force of this project, and the one that I am left with as I attempt to finalize it. My family often describes my halmoni’s fight and her willingness to run amidst the violence and shifts during her life that impacted her body’s movement. What exactly is it that remains in the generations that have followed her? How have the ways in which so many women in my family re-experienced racialized and gendered violence trouble the linearity of temporality? And why do the women in my family continue to run?

My three points of inquiry—why has small, foreign, and female been racialized and gendered in this formation; how does technological progress and futurity in a particular contextual moment make hypervisible and invisible the small, foreign, and female to think about

progress; and what remains of the configuration of small, foreign, and female as it is experienced in movement across generations and through moments in time—are questions circulating in the objects in my archive. I focus on the ways in which Asian women’s bodies are oriented toward the future, not only under liberal humanist versions of progress that turn their bodies into objects, but also how they position themselves in terms of temporality across generations. My initial readings of *Salt Fish Girl* and my intertwining of the text with “Mymother,” in many ways, recreate the journey I’ve taken with this project. My interest in technology and futurity, in Asian women’s racialized and gendered embodiment, can never extricate themselves from wanting to understand under exactly what conditions my halmoni ran.

My project first centers on artifacts produced through corporations like Intel and Apple, that seek to define the terms of futurity, whether that be in making determining claims about what is considered art or what technology provides for what it defines as the developing world in its configurations of small, foreign, and female. It then pulls apart the terms of its insistence on progress as temporality and futurity through reading these documents as speculative in relation to Asian American cultural forms. To return to the intervention of small, foreign, and female then, reading this racial form alongside the militarized foundations of the Internet and ideological interpellations of gendered identities is important as an Asian American feminist intervention in technology’s form. Sitting with technology alongside Asian American form allows us to think about the experiences of women who have shaped, been shaped by, and resisted techno capitalism through movement.

Liberal Personhood and the Speculative Visions of Women of Color Feminism

I address these lines of inquiry through a framework of speculation, where I employ the speculative specifically as a mode of reading grounded in women of color feminism. This methodology uses the speculative, often thought about in relation to science fiction, that imagines the future in relation to technology, to trouble technology's futurity. As Aimee Bahng defines, reading against and expanding upon Darko Suvin's definition of science fiction as the genre of cognitive estrangement,² speculative fiction, she notes, is less about a particular set of genre conventions and more about the question of "what if?" Deploying the speculative mode for Asian American studies involves asking "is there another way to imagine Asian futurity that is not always already working toward capitalist gain?" (Bahng 125). Samuel Delany grapples with the definition of speculative fiction in his essay "About 5,700 Words," stating that if a story in a reader's mind is what is built out through each word added, there is greater subjunctivity in speculative fiction than other genres. Subjunctivity in Delany's definition defines the parameters of the words that can follow, where rather than words referring to what has happened or what could not have happened, speculative fiction is concerned with things that have not happened. At this level, "SF expands the freedom of the choice of words that can follow another group of words meaningfully, but it limits the way we employ the corrective process as we move between them" (Delany 11). Speculative fiction, rather than strict definitions of genre, is a space where the grouping of words leads to fictive worlds that force the reader to suspend themselves as they think about what has not happened but what could be. I build on these definitions of speculative

² Suvin, Darko. *Metamorphoses of Science Fiction: on the Poetics and History of a Literary Genre*. Yale University Press, 1979.

fiction as the act of imagining alternate futurities that trouble the conditions of the present. I expand on these definitions by intertwining and contextualizing them within women of color feminism, which seeks to imagine alternate futures while drawing attention to the conditions of liberal personhood and racial capitalism under U.S. imperialism.

I define liberal personhood here alongside Grace Hong's definition of property as social relations rather than objects themselves, where ownership is about the ways in which "the state protects one's right to own something by ensuring that no one else does" (Hong, "Property"), naturalizing notions of the liberal subject through disavowal that "disallows knowledge of the ways in which imposition of propertied subjectivity is inherently dispossessive along the lines of race, class, and gender" (Hong, "Property"). As Jodi A. Byrd, Alyosha Goldstein, Jodi Melamed, and Chandan Reddy argue in "Predatory Value: Economies of Dispossession and Disturbed Relationalities, the emphasis on ownership and property in relation to freedom are:

rationalities that enact and disavow racial and colonial violence by constituting people, land, and the relations of social life as translatable into value form, making incommensurate histories, experiences, and forms of social being commensurate by reducing them to their meaning and value within the "capital relation," placing them within the ontology of dis/possession. (7)

Freedom here is deployed alongside indigenous dispossession, placing relations between subjects within a system that defines equality and access in terms of further capital accumulation.

Additionally, liberal personhood operates within the terms of liberal multiculturalism, where inclusion of racial and gendered difference operates through a disavowal of the terms of inclusion.

This liberal subject, and the ways in which they can practice relationality with others, is then intertwined within a system of racial capitalism. I define racial capitalism, using Jodi Melamed's reading of primitive accumulation. Melamed, engaging with Cedric Robinson's definition of racial capitalism, states that the term "requires its users to recognize that capitalism is racial capitalism. Capital can only be capital when it accumulates, and it can only accumulate by producing and moving through relations of severe inequality among human groups" ("Racial Capitalism" 77). Racial capitalism as an ongoing state, actively occurring, specifies the ways in which social relations are enfolded within its system. Melamed thinks about the truncating of relationships that don't fit within this sense of sociality and accumulation, forgetting indigenous modes of interconnectedness. Byrd, Goldstein, Melamed, and Reddy point to the potential of worlds that recover alternate forms of relationality in relation to the nonhuman world and land that exceed liberal personhood and the human. Speculative horizons for racialized bodies to exist and take up new forms of space, where bodies are not symbolic of dehumanized racial capital, but are read in terms of their capacity to expand beyond the liberal values of what constitutes the human.

The speculative potential is part of the world building task of women of color feminism which insists on the personal as political and the question of "what if," alongside Delany's definition of speculative fiction relating to "what has not happened." Women of color feminism's investment in these questions is grounded in a vision concerned with troubling the terms of racial capitalism under a political economy that genders and racializes certain bodies. The speculative horizons and new possibilities for relationality outlined by Byrd, Goldstein, Melamed, and

Reddy are enacted in women of color feminism's insistence on an intersectional approach³ to the ways in which race, class, and gender are operative and can be employed as analytic tools to examine systems of power. This emphasizes the ways in which centering personal narrative troubles the terms of capital by making visible what liberal progress seeks to disavow. For example, the 1977 Combahee River Collective statement was key in developing this conception of identity and the ways in which systems of oppression can be thought of as speculative and dismantled by centering Black women's experiences. In the section "What We Believe," the statement outlines the formation of politics that stem from the belief that Black women are inherently valuable, where liberation is a necessity. It is founded on an identity politics that asks us to think about the politicization of our own lives. The section points to the current context and conditions of racialization and gender, arriving at the:

necessity for developing an understanding of class relationships that takes into account the specific class position of Black women who are generally marginal in the labor force, while at this particular time some of us are temporarily viewed as

³ In Patricia Hill Collins and Sirma Bilge's *Intersectionality* they define an intersectional approach as one that thinks about how race, class, and gender operate together not as identity categories but as analytic tools, to examine the "major axes of social divisions in a given society at a given time" (4). Women of color scholarship is essential to Collins and Bilge because of its "way of interconnecting personal experiences and structural analyses of interlocking oppressions without skirting the meaning of life experiences, multiple identifications, and political communities" (76-77)—particularly narratives that have been overlooked and marginalized in multiple ways. See Hill, Collins P, and Sirma Bilge. *Intersectionality*. Polity, 2016.

doubly desirable tokens at white-collar and professional levels. We need to articulate the real class situation of persons who are not merely raceless, sexless workers, but for whom racial and sexual oppression are significant determinants in their working/economic lives. (Combahee River Collective)

This statement specifically enacts a speculative vision, existing between space of “how things are” and “how things could be.” This section echoes a new politics of embodiment and relationality that centers Black women’s labor to think about alternate relations between others’ racial and sexual stratification and lives in a world building task that “necessitates the destruction of the political-economic systems of capitalism and imperialism as well as patriarchy” (Combahee River Collective).

The importance of the personal as political in women of color theoretical formations is an insistence on centering individual experience and knowledge through what isn’t validated as such. This power of the personal is what Audre Lorde points to in imagining the erotic as a site of care and possibility to share the power of feelings and experiences, to invite others to participate in that experience with us, as a site of political possibility.⁴ Personal experience here doesn’t serve as a guarantor of truth or representable reality, giving us access to the subaltern, but rather what Neferti Tadiar argues as “figurations of possibilities of life...theoretical perspectives on both dominant and residual cultural logics of social life” (17). Literature is both theoretical and ethnographic for rewriting a history of the present, a site of transformative possibility that points to the outsides of US imperialism and capitalism before they are subsumed.

⁴ Lorde, Audre, and Cheryl Clarke. *Sister Outsider: Essays and Speeches*. Crossing Press

Feminist Series, 2007.

In prioritizing and centering personal narrative, in engaging with identity politics in this way, there is a consistent looking forward involved—the type of speculative act central to my practice of reading. This looking forward doesn't involve thinking about personal narrative as guaranteeing the truth of a past, nor articulating the facts of any given present, but rather a generative refusal⁵ that traces how the racialized and gendered subject moves through spaces and temporalities, experiencing embodiment and creating spaces of resistance and care within inherently violent systems. Saidiya Hartman poses the speculative form of retrieval in “Venus in Two Acts” when she asks, “how can narrative embody life in words and simultaneously respect what we cannot know?” (3). Hartman writes of the limits of the archive, speculative arguments, and the capacity of the subjunctive, to put forth a critical reading of the archive through critical fabulations to imagine a history that never could have been because of what is written to make it invisible. Above all, this speculative question of “what if” through centering the personal as political is an act of care that asks us to think deeply about what can't be given voice to and how we can sit and validate individual experiences, while unpacking the ways in which we have been taught not to validate these as sites of knowledge in cultural production.

⁵ In “Memory, Creation, and Writing,” Toni Morrison puts forth the idea of imagining and writing as a generative refusal where the project of memory isn't about finding out the incontrovertible truth but creating a form of willed creation. See Morrison, Toni. “Memory, Creation, and Writing.” *Thought*, vol. 59 no. 235, 1984, p. 385-90

Speculation and Asian American Feminisms

Expanding on the notion of looking forward toward a framework that would allow U.S. women of color activists to distance themselves from the values of mainstream society, while enacting solidarity transnationally and across lines of racial and gender difference, is a desire grounded in critical possibility. As Grace Hong theorizes, women of color feminism is a reading practice astute at witnessing “the transition from capital’s global phase to its national phase” (*The Ruptures of American Capital* xxi). As it particularly pertains to my dissertation, this transition from racialized and gendered practices of flexible accumulation, such as subcontracting work and an international division of “flexible” labor, is witnessed and experienced in cultural production that seeks to account for what capital makes unspeakable. In this way, the United States works referentially alongside the analytic of women of color feminism, pointing to the conditions of violent accumulation, to then move outward and think about speculative potentials. The history of women of color feminism within the Third World Women’s Alliance and women of color political formations theorized the ways in which difference and alliance with women across global spaces made it possible to critique the conditions of oppression under U.S. imperialism, as women in the U.S. and women in the third world. This political vision historically provided women of color activists with what Judy Tzu-Chun Wu calls a “radical orientalism” (Wu 63) which involved enacting solidarities and finding political inspiration in Asian women fighting against US imperialism, as well as US women of color across racial struggles “who wanted to name US imperialism tended to distance themselves from what they perceived as the militaristic and racist values of mainstream American society” (Wu 53).

In the introduction to *Asian American Feminisms and Women of Color Politics*, Lynn Fujiwara and Shireen Roshanravan think about what it means to theorize Asian American feminisms and its theoretical interventions in relation to a coalitional politics of women of color feminisms.⁶ As they answer this question, they outline critiques of coalition and its possibility for eliding difference through heterogeneity.⁷ The political tensions between Asian American liberal and radical feminisms; the elision of difference and dispossession—particularly in subsuming Pacific Islander studies under the category of AAPI; and failing to situate not only resistance, but the sites of complicity in relation to Black, Indigenous, Chicanx and Latinx experiences are critiques outlined in relation to positing forth the notion of a Third World Women’s alliance. However, these very tensions are possibilities for reorienting coalition as always grappling with ongoing racial and gendered struggles. In this sense, women of color feminism is not as they say

⁶ Fujiwara, Lynn, and Shireen Roshanravan. *Asian American Feminisms and Women of Color Politics*. Seattle: University of Washington Press, 2018. Print.

⁷ Lowe argues for the "Asian American necessity – politically, intellectually, and personally – to organize, resist, and theorize as Asian Americans, but at the same time I inscribe this necessity within a discussion of the risks of a cultural politics that relies upon the construction of sameness and the exclusion of differences" (259). Lowe puts forth a concept of difference in cultural politics by characterizing Asian American racial form as one of heterogeneity, multiplicity, and non-equivalence, rather than suppressing differences and reproducing a binary construction of logic. See Lowe, Lisa. "Heterogeneity, Hybridity, Multiplicity: Marking Asian American Differences." *Diaspora: A Journal of Transnational Studies*, vol. 1 no. 1, 1991, p. 24-44.

about escaping and seeing the transnational, subaltern,⁸ figure elsewhere, “not in a patriotic celebration but in a women of color commitment to accountability for all violence constitute of the US settler-colonial state” (Fujiwara and Roshanravan 9). Rather than seeing identity strictly in terms of individual subjection, women of color feminism as an analytic means thinking about subjection and complicity under the terms of U.S. empire. The constant reimagining of global spaces and the connections between women across the boundaries of the nation and militarized borders, a desire for relation—without subsuming difference—to articulate different sites of knowledge, and the creation of a political identity of women who experienced triple oppression from patriarchy, racism and imperialism, as well as capitalism, is an act of solidarity that necessitates accountability and a new subversive redefinition of racial and gendered categories that mark one as other, outside of what capitalism seeks to encompass in its totality.

I trace women of color feminism’s attunement to the conditions of the local and the global, centering U.S. empire to introduce my discussion of Asian American women’s racial and gendered form. Scholars have elaborated on Asian American women's racial and gendered form, thinking about the knowledge that can be produced by the very idea of a knowable subject. I specifically think about the term Asian American within Laura Hyun Yi Kang’s notable definition of this subject position as an analytic. Kang employs the slash in Asian/American women to think about the “geopolitical pressures of the continental (Asian), the national

⁸ In Gayatri Spivak's essay, she thinks about the terms of political subjectivity and the politics of imagining the subaltern, for the subject that is unable to speak in the context of colonial production. See Morris, Rosalind C, and Gayatri C. Spivak. *Can the Subaltern Speak?: Reflections on the History of an Idea*. Columbia University Press, 2010.

(American), and the racial-ethnic (Asian American) as they come to bear on an implicitly more solid gendered ontology (women)” (2). Her engagement with this subject position at the confluence of these forces is not to get at the interiority of Asian/American women, nor to make a claim about the totalizing reality of what it means to be Asian/American, but rather how what these claims to know Asian/American women “might suggest about the instability and inadequacy of those generic delineations of individuality and collectivity” (3) where the experience of a subject position might reveal something about the terms of representation and inclusion. Kang thinks about how Asian/American women have been imagined, to get beyond the truth of the represented object itself to a more compositional engagement for how these racial and gendered bodies are formed and positioned. Specifically, Kang shows how Asian bodies “have come to matter for two linked registers of transnational labor: (1) the political economies of assembly-line manufacturing, military prostitution, and sex tourism, and (2) the discursive economies of representational practices and knowledge claims about Asian women workers in those three interrelated sites” (165). These forms of legibility are traced to think about how we come to know anything about this specific compositional subject.

Celine Shimizu builds on Kang’s discussion of Asian American women, by focusing more specifically on the hypersexual forms that shape identity and consciousness in the context of possible representations of Asian women’s sexuality in the 20th century United States. Shimizu asserts that the ways in which Asian American women who understand their identity and possibilities always engage with hypersexuality to know themselves and what is placed upon them. This knowledge is the foundation for opening up “possibilities for how Asian/American women are constructed through sexuality as a disciplining and objectifying force—as well as its arming power when put in service of Asian American women” (16). These discussions of

knowable subjects create room for engaging with how racial and gendered form, such as small, foreign, and female, are experienced within and outside knowledge constituted of the racialized body.

Other scholars think about embodied knowledge in relation to what it means to exist in the space of human and nonhuman for Asian American women. Anne Cheng points to the experiences felt in excess of racial form, where Cheng uses the idea of ornament for Asian American female personhood, which representatively oscillates between commodification and fetishization. However, Cheng critiques that these questions “do not ask the harder questions of what being is at the interface of ontology and objectness” (432), where certain experiences and accounts come from the space of the inorganic, outside of liberal humanism. Rachel Lee is engaged with these questions, in terms of how bodies are racialized and gendered, through degrees of the not-quite human in Asian American studies within categories like coolie, sex worker, laborer, etc. Lee points to how the tensions in the discipline between thinking about race as a discursive formation or a biological one render Asian American cultural production useful for thinking about the tensions of Asiatic racial form in relation to the way it intersects with questions about the biological and political economy.⁹ Michelle Huang extends this notion of Asian American racialization to question what remains with “the durability of race, which, much like plastic particulates, photodegrades but never biodegrades, demands and exploration of how Asian American racialization materializes and circulates even in the absence of readily identifiable human bodies” (105). These critical conversations are concerned with possibilities

⁹ Lee, Rachel C. *The Exquisite Corpse of Asian America: Biopolitics, Biosociality, and Posthuman Ecologies*. New York University Press, 2014.

outside of liberal humanism, asking what remains of race when thought about outside of human bodies, extending Kang and Shimizu's concerns with knowable subjects and representative experience by thinking about racial formations represented in terms of technological posthumanism or thingly-ness.

Rather than pointing to any form of knowledge claim that centers on what analyzing and knowing Asian/American women might reveal, I expand on Kang's rationale for the subject position of Asian American women through a phenomenological approach to thinking about racialized and gendered embodiment. Building on the analytic of Asian/American women as an analytic, I extend Sarah Ahmed's concept of queer phenomenology to think about how bodies are oriented spatiotemporally, based on how habitual actions and movement that shape consciousness. The personal experience of "how bodies are gendered, sexualized, and raced by how they extend into space" (Ahmed 5) forms knowledge from familiarizing oneself with what is near and how to extend beyond to build new forms of positional orientation. At one point in *Queer Phenomenology*, Ahmed reads Judith Butler's understanding of turning to think about moving away from lines and paths so well worn in by social formation that they seem invisible. The act of turning makes a difference in how subjects move away and learn to turn. In many ways, this act of turning is like the act of running that I close read in my analysis of *Salt Fish Girl* and "Mymother." The spontaneity of running, from Asian American forms of embodiment that might put an individual on a path that is socially well-worn, that might turn a racialized and gendered subject into an object, creates new ways for bodies to take shape, and in turn allows this knowledge to pass itself down across generations from multiple points of departure. As Ahmed states, "phenomenology helps us to show how race is an effect of racialization, and to investigate how the invention of race as if it were 'in' bodies shapes what bodies 'can do'" (112).

Racialization and phenomenology align in the ways in which it allows us to think about embodiment, in the context of what it means to be turned into an object to be consumed or used through registers of whiteness. In this sense, running is not only an act of survival in terms of immediate danger, but also an act of recreating a path from what is unknown.

My dissertation's focus on Asian American women's cultural production and phenomenology doesn't seek to reveal the truth about any interior life, nor make knowledge claims about what Asian American women's subject position may reveal, but rather seeks to expand possibilities for how bodies can exist expansively and how the experience of running between places, economies, and systems opens up the figure of small, foreign, and female. This mode thinks about this phenomenology, specifically within the conditions of global capital, focusing on the tensions that U.S. women of color feminism reveals.

The value of reading personal narrative in cultural production, within Asian American studies, has been theorized by scholars thinking about the ways in which culture reveals what is disavowed or made invisible by an imperial vision that seeks to obfuscate its violence. Lisa Lowe's articulation that the contradictions of the global economy, and capitalism's need to seek new markets, mean the nation must resolve these contradictions through its articulations and narratives of the Asian immigrant subject.¹⁰ For Lowe, Asian American cultural production serves as an:

alternative formation that produces cultural expressions materially and aesthetically at odds with the resolution of the citizen in the nation. Rather than

¹⁰ Lowe, Lisa. *Immigrant Acts: on Asian American Cultural Politics*, Duke University Press, 2007.

expressing a ‘failed’ integration of Asians into the American cultural sphere, the distance preserves Asian American culture as an alternative site where the palimpsest of lost memories is reinvented, histories are fractures and retraced, and the unlike varieties of silence emerge into articulacy. (Lowe, *Immigrant Acts* 6)

These alternative sites disrupt the silences so readily enforced to preserve the conception of the nation, progressing through time, distancing itself from the violence left in its wake. These forms offer what is made invisible, what is outside of what is so easily articulated. Jodi Kim additionally thinks about these cultural forms as “palimpsests of partially visible and partially erased imaginings and longings, themselves sketched over already partial official national scripts” (6). This space of what exists for Kim reveals some of the ongoing afterlives of the Cold War, pointing to American militarism through various Asian American articulations of the memory, across generations of war. For Victor Bascara, pushing specifically on the framework of Asian American immigration and militarism, imperialism that causes Asian immigration disappears specifically through two mechanisms, “multiculturalism and globalization, the two ideologies that have been most effective for enabling U.S. imperialism to perform its disappearing act” (23). By continuing to think about the unburdening of U.S. imperialism in Asian American politics, other forms insist on remembering what the nation needs to forget. I read these critical formulations of the value of Asian American cultural production, as specifically pointing toward the speculative value of these palimpsests of lost memories that not only draw attention to what is made invisible, but also the speculative potential of what new formations might be possible, from what has not yet happened.

For example, in my own positionality as a mixed-race Korean American reading stories like my halmoni’s, scholarship that has emerged from Korean American scholars, critically

reading literature for the ways in which it renders intergenerational trauma or postmemory,¹¹ were a starting point for some of my thinking on small, foreign, and female. Scholars like Grace Cho center the figure of the yanggongju, to think about how camptown prostitution allowed many Korean Americans to enter the United States post-1965 through family reunification visas. This disavowal of the yanggongju, the shame and silence that surrounds her life and the reasons for militarized migrations, creates “a figure that has been transnationally produced out of the unresolved traumas of war and division” (Cho 103), a constant presence across generations. Seo-Young Chu writes about this form of postmemory han as postmemory she likens to an almost superpower that allows the Korean American to telepathically perceive history and memory. Unable to ask her parents about memories that are fractured or not speakable, postmemory han is a form of vision where the act of looking, remembering, and feeling allows the “Korean American telepath...to perceive time as a molten substance charged with past likeness, futurity, and duration” (Chu 109). The very break with the past and its irretrievability becomes a feeling that creates a new form of knowledge that mutates ways of thinking about time as linear. Other scholars like Crystal Baik trouble the notion of han as something that gets passed along as postmemory. Building and extending Jodi Kim’s argument of the Cold War as “not only a historical period, but an epistemology and production of knowledge” (Kim 3), Baik doesn’t see the past as simply being transmitted into the present through memories that can be telepathically conceived of, but rather highlights the importance of unraveling the Korean War as an ongoing

¹¹ See Hirsch, Marianne. *The Generation of Postmemory: Writing and Visual Culture After the Holocaust*. Illustrated edition, Columbia University Press, 2012.

event that continues to change social life. Drawing attention to these militarized formations is essential in a time where “because war is so thoroughly everywhere, it seems nowhere at all” (Baik 17), particularly in spaces of the domestic that mask militarized migrations. While the work of scholars like Jodi Kim and Crystal Baik in particular allows us to think about passing down memories or violence in their intangible form through cultural production, I’m interested in extending these points of analysis to think about how these memories are specifically experienced from the embodied, situated formation of small, foreign, and female as this body moves throughout the world and exists across generations in an Asian American feminist speculative world building task that thinks about these various forms of memory and transmission, alongside potentials for new types of relationality.

My dissertation traces these conversations in my centering of small, foreign, and female, to break apart how the knowledge formed about this subject reflects how Asian women are understood and placed within technology’s political economy—operating to naturally racialize and gender certain bodies to make invisible the United States’ presence in Asia throughout the Cold War and its need for exploitable immigrant labor across time. In this formation, small, foreign, and female points to and signifies something else outside the violent confines of nonhumanness. Just as Nu Wa moves across different historical spaces, her movements and bodily form are impacted by the way her body is placed within various political economies. This account shows what it means to be seen and experience life, make choices, be exploitable, and find new forms of agency within a climate of racial and gendered violence. Rather than seeing mechanization or nonhumanness as totalizing, seeing small, foreign, and female as overdetermining, I seek to center Asian American historical formations, pointing specifically to the contemporary emergence of small, foreign, and female, to instead argue for an engagement

with cultural production that seeks to read the violence of technology's disavowal, alongside Asian American cultural forms that offer phenomenological accounts of these experiences and reconceive of technology's temporality. Or to return to the stakes of my other, more personal question, what knowledge did my halmoni develop and what did she experience to survive dominating visions of racial violence? And what is left of her life and that knowledge as it's been remembered and passed down?

Asian American Racial Formations

At the Museum of History and Industry, where a history of the rapidly changing Seattle is intended to be preserved, an artifact intended to expedite and mechanize the salmon butchering process is on display. The machine, called the "Iron Chink", was "intended to displace skilled Chinese hand butchers; it would never get tired, take a break, or go on strike" (MOHAI). The machine itself became a technological tool that embodied an ideal immigrant laborer, erasing the boundary between the industrial laborer and the technological labor and goods they produced. The "Iron Chink", violently dismembered salmon and sealed them into cans, cutting them apart for parts to extract profit from the goods as quickly as possible. Although the name the "Iron Chink" is meant to describe the machine that displaced Chinese labor, the comparison between the dismemberment of salmon for their "useful" parts and the extraction of labor and dehumanizing of the immigrant body also seems to adequately describe the industrial machine's name.

I anecdotally describe the "Iron Chink" because the mechanization of racial form here reveals the ways in which categories of human and nonhuman have historically been a container into which the modern order defines certain bodies in terms of a binary between capitalists that

make money from the machine and the nonhuman which can only be made more human through development. As Michael Omi and Howard Winant's define racial formation as "an unstable and 'decentered' complex of social meanings constantly being transformed by political struggle" (55), attention is drawn to the mutability of race, produced, agreed upon, and experienced at the level of experience through possibilities for choice and social mobility. The ways in which these social meanings are produced and contested through categories of racialization, is demonstrated here in terms of what bodies are mechanized. Sylvia Wynter explores how the categories of "rational" man and "irrational" nonhuman, shift throughout historical moments, where the genre of being human gets defined and organized according to what is needed to "function for the nation-state as well as the imperial orders of the Western bourgeoisie" (322). Alexander Weheliye writes of the ways in which the posthuman does not account for racialization as a process, where "the idea of racializing assemblages, in contrast, construes race not as a biological or cultural classification but as a set of sociopolitical processes that discipline humanity into full humans, not-quite-humans, and nonhumans" (4). Rather than seeing the body as being guaranteed possessive individualism, these critical conversations ask the question, what is the value of the posthuman for those that have never been deemed fully human?

The nonhuman formation of the Asian American woman's body as small, foreign, and female is part of a larger history of situating Asian bodies and their bodily forms within the context of a mechanized future where the nonhuman is produced through seeing certain bodies as futuristic aliens or as stuck in the past. In relation to technology's temporality of futurism and progress across time, Asian bodies moving across different historical moments have experienced their own ability to move in relation to various periods of industrialization and technological development. Mechanized and thought of as an expendable form of technology, as illustrated by

the example of the “Iron Chink,” Asian racialization has been historically intertwined with the industrialization of the United States where Chinese coolie labor was dehumanized and narrated as machine-like, alongside rising anxieties over the terms of production and consumption within the United States. As Moon-Ho Jung states of coolie labor, coolies were constructed from a “conglomeration of racial imaginings that emerged worldwide in the era of slave emancipation, a product of the imagers rather than the imagined” (5). This imagined racial category, made nonhuman in its coolie form to be thought of as an expendable form of technology, was thought to be able to endure harsher labor, increased pain, meager living conditions because of the coolie’s body that endured what Eric Hayot describes as superhuman pain.¹² The anxieties around a racial threat to a white American working class, was managed through imagining the coolie’s body as one that could be transformed into a machine. In other words, “to be in the presence of the visible duplicity of an embodied, human sign was to be in the presence, by definition of something Asiatic: past and future, animal and superhuman” (Hayot 122). This superhuman, nonhuman, atemporality was used to gain support for the Page Law of 1875 and the Chinese Exclusion Act of 1882 where the infiltration of this alien, non-human workforce would eat away at an imagined true American identity. This biological transformation of the immigrant body signified for white America the mechanization of the United States, the coolie’s presence suggesting a dystopian future. As Colleen Lye argues, this Asiatic racial form in relation to the globalizing of labor markets reflects, “the intensification of commodity relations and capital’s

¹² See Hayot, Eric. “Chinese Bodies, Chinese Futures.” *Representations*, vol. 99, no. 1, University of California Press, 2007, pp. 99–129.

global expansion” (10). For Lye, the representability of this Asiatic figure means that race is an economic concept that takes its representative form and phenomenological experiences in relation to capital, rather than solely whiteness.

In the context of the history of racial formation outlined above, I’m particularly interested in how these social, political, and economic experiences of race are lived and experienced across generations of women in relation to the gendered and racialized labor of empire that intertwines to create the figure of small, foreign, and female. For example, the superhuman/nonhuman in relation to the various restrictive immigration acts, had the effect of creating regulatory parameters around which bodies could move through space and be identified as legitimate. Thy Phu for example, explains how photography was central to this task, in policing Asian women’s bodies for fear of their hypersexuality, photographs were used by migration officials to determine entry claims and the validity of citizenship through the “centrality of the Asian female body for the establishment of an increasingly standardized process of identification” (27). Legitimacy in this sense is performed through a performance of gender and sexuality, that impacts Asian immigrant women as they constitute their identities and bodily movements and space in relation to the racialized ways in which they are seen as mechanized. This racial form draws attention to the ways in which racialization as an economic concept, must also point to how the embodied phenomenological experience of Asian women’s hypersexuality, within the flows of migration and capital, points to how what can’t be accounted for by technological progress is often enfolded in the home, in relationships across generations of women, and through other forms of care and intimacy that are so often relegated to the private. For example, Grace Cho’s aforementioned centering of Korean war brides and sex workers elucidates how the war bride, despite being the pioneer of Korean migration to the US under the 1965 Immigration

Act and family reunification policies, “operates as a figure for the disappearance of geopolitical violence into the realm of the domestic. And what better place to bury a social trauma than in the closely guarded space of the family? (Cho 14). The making invisible of the labor of women through the disavowal of the sex-worker and military wife becomes a mechanism for disavowing trauma, while simultaneously extracting the benefits of a post-war economy built through such labor.

The space of the home post Immigration and Nationality Act of 1965, point to what the United States tries to disavow, altering gendered forms and relations between Asian American families. In these transformations women and men’s lives change within the economic racialized functions of the state where the constant renegotiation of family gender roles isn’t simply a function of racialization but gender as well. Y en L  Espiritu explores the relationships between Asian American men and women through an intersectional analysis of race and class in relation to migration and settlement. By tracing the ways in which migration theoretically improves women’s social positions through increased wage and more family participation, women’s changing roles were often found to be made worse in other domains where men’s patriarchal authority and emasculation within the United States shifts—men becoming a sort of surplus. This combined with the ways in which women are treated as more exploitable within the political economy, under the logic of small, foreign, and female leads to a transitioning into other patriarchal systems from old ones.¹³ How class struggles intersect with race and gender is

¹³ Espiritu, Y en L . *Asian American Women and Men: Labor, Laws, and Love*. Sage Publications, 1997.

important to think about post 1875 and 1882, when the 1965 Act sees women dominating the new influx of immigrants.

Furthermore, the contradictions of the United States in its need to make new markets and find new extractable resources for capital, pushes the logic of the heteronormative home within its structure to maintain the imagination of the United States as benevolent benefactor. Chandan Reddy writes of this contradiction, tracing the figure of the Chinese prostitute and the bachelor societies formed under immigration acts to the figure of the gay Pakistani immigrant, existing under neoliberal migration. Reddy explores how family as a regulatory form emerges for the United States to enable its need for immigrant workers while narrating itself as benevolent in its reunification of broken families under the 1965 Immigration Act. As Reddy states, “federal immigration policies such as Family Reunification extend and institute heteronormative community structures as a requirement for accessing welfare provisions for new immigrants by attaching those provisions to the family unit” (110). Families that then provide services that the state is not responsible or accountable for, creates heteropatriarchal relations that justify exclusion, while the United States maintains its identity as the guarantor of progress and sexual freedom. Given the ways in which Asian American racial form has mutated and been racialized and gendered to address the various paradoxes of capital accumulation, I specifically think about these flows of migration in the bodily memory and lived experiences of small, foreign, female—a formation that I situate and choose to examine from a series of cultural products that span from the early 1990s to the late 2010s.

My dissertation specifically contextualizes the embodied phenomenology I close read, within the moment that this formation was declared by the white, male hiring manager, interviewed by Hossfeld in the early 1990s. While feminists have tried to draw attention to the

private spaces of the home and the right to work for mostly white women, women of color feminists have theorized on not only the unpaid labor of home, the double shift, and how family relationships and gender roles change through migration. Thinking alongside women of color as they are exploited across public and private spaces, given the historical context outlined above, is central to the figure of small, foreign, female as the three words that describe the very racial and gendered formation, point to the justification for their exploitability under capital. Describing one's body as small, foreign, and female doesn't lead to the truth of the body, or hiring practices for that matter, but rather reflects on how sexuality, race, immigration, and citizenship impact the ways in which Asian women experience racial formation and carry knowledge of lived history. This racial form articulated within the context of technology's high-tech manufacturing is intertwined with narratives of technological development.

Information studies and history of technology scholars have historically traced the militarized foundations of the Internet and its relationship to gender. In *Inventing the Internet*, Janet Abbate discusses the militarized concerns and goals with early Internet technologies such as ARPANET.¹⁴ Physical locations of nodes away from population centers, like early Silicon Valley and cryptographic features were ideological functions built into the design of technological tools. The military industrial complex's funding of research complexes in Silicon Valley and Boston overlapped throughout the same period of 1960s Asian immigration and Cold War militarism throughout Asia. Scholars such as Ruth Oldenziel unpack what the term technology has come to connote by tracing how the masculinization of technology has led to an understanding of technology as "an emblem of Western man's superiority and civilization" (20).

¹⁴ Abbate, Janet. *Inventing the Internet*. Cambridge, MIT Press, 1999.

Oldenziel's work carefully unpacks how the interpellation of gendered identities and the movement of technology away from being seen as craft work and toward a conception of an engineer, reveal how gender is essential to technology's political economy. Nathan Ensmenger further follows this gendered formation into the mid to late 20th century by recalling how computer programming in the 1950s was associated with routine and repetitive work, thought to easily be mechanized, and therefore gendered to be female in a field that was dominated by women. The increasing demand for programmers, as well as increased military spending led to higher salaries and the need for a new ideological notion of the programmer as a creative, independent genius—masculinizing the profession and discounting women's work as technological.¹⁵

While these accounts trace the foundations of the gendered formations of technology in relation to the Internet that would come to be in the 1990s, I find they inadequately think about the role of mechanization as it pertains to racial form. While other scholars that expand on race and gender as it relates to technological development focus on the way technology expounds existing inequalities, relies on racialized labor, and embeds systemic inequity into its structure, there is a gap in scholarship that thinks about the early foundations of the Internet not as a precursor to the contemporary moment, but rather as existing alongside histories of racial capitalism and militarism. This relationship is necessary to engage with how the development

¹⁵ Ensmenger, Nathan. "Beards, Sandals, and Other Signs of Rugged Individualism': Masculine Culture within the Computing Professions." *Osiris*, vol. 30, no. 1, The University of Chicago Press, Jan. 2015, pp. 38–65.

and ongoing speculative constructions of technology's future are intertwined with racial and gendered notions of contamination, immigration, and labor.

Expanding on these histories of the shifting means of production alongside the changes brought on rapidly by technology in the late 20th and early 21st century, Asian American feminist scholars have traced how the globalization of capital has shifted manufacturing operatives abroad, while simultaneously creating some of the same factory conditions within the United States. Increased internationalism of labor and capital, as well as the Cold War displacement of immigrants in countries like Korea and Vietnam, led to the globalization of manufacturing operatives and the creation of a flexible workforce since the 1980s.¹⁶ This new international division of labor, specific to the context of the United States in the ways in which the “transnational industry’s use of Asian and Latina women’s labor-in Asia, Latin America, and the U.S.-is the contemporary site where the contradictions of the national and the international converge in an overdetermination of neo-colonial capitalism, anti-immigrant racism, and patriarchal gender stratification” (Lowe, *Immigrant Acts* 160). Women of color, placed within the flows of technology’s political economy, experience their racial and gendered formation through the ways in which capital accumulation thinks of borders that come up in terms of maintaining the nation as it seeks to exploit and accumulate immigrant labor, alongside borders that disappear as goods and labor move through export processing zones and domestic factories.

Scholars in the early 2000s drew attention to these contradictions and parallels, such as Miriam Ching Yoon Louie who traced the shifts in the modernization of the Chinese economy in

¹⁶ Lowe, Lisa. *Immigrant Acts: On Asian American Cultural Politics*, Duke University Press, 2007.

the 1990s toward special economic zones¹⁷ all alongside the growing documented and undocumented workforce of low-wage women of color in the integrated global factories of Los Angeles, New York, and San Francisco. Aihwa Ong writes of the ways in which transnational corporations and the state in Malaysia specifically have controlled workers' bodies and sexualities by thinking about how women in export processing or free trade zones, often are placed onto a history of militarized sex tourism.¹⁸ Swasti Mitter also thinks about the relationship between U.S. militarism in giving aid to host states to develop the industrial economy, in places where there is a record of military aid to capitalist governments where existing patriarchal systems serve further militarization and a gendered workforce.¹⁹ Furthermore, Eileen Boris and Rhacel Salazar Parrenas think about care work in relation to neoliberalism, and the intensified responsibilities of women that compound their intimate labor through increased deregulation and disparity²⁰ across global spaces. The transnational movement of women of color in the global

¹⁷ Louie, Miriam Ching Yoon. *Sweatshop Warriors: Immigrant Women Workers Take on the Global Factory*. South End Press, 2001.

¹⁸ Ong, Aihwa. *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia*. State University of New York Press, 1987.

¹⁹ Mitter, Swasti. *Common Fate, Common Bond: Women in the Global Economy*. Pluto Press, 1986.

²⁰ Boris, Eileen, and Rhacel S. Parreñas. *Intimate Labors: Cultures, Technologies, and the Politics of Care*. Stanford University Press, 2010. See also Kang, Miliann. *The Managed Hand: Race, Gender, and the Body in Beauty Service Work*. University of California Press, 2010. Kang writes about how the downsizing of manufacturing work in the United States and transnational

factory, theorized during this time, points to the neocolonial process of women who “migrate from countries of origin formerly colonized by the United States, or currently neocolonized by U.S. corporate capital, and come to labor here as racialized women of color in the same conditions in different global spaces” (Lowe, *Immigrant Acts* 165). In this sense, the contemporary formation of small, foreign, and female, phenomenologically experiences their embodied movements across local and global sites, as their movement and labor get tied to the notion of opportunity and progress under technological determinism.

As technology’s economy insists that Asian immigrant labor continue to be reproduced as a hyper exploitable machine, Asian bodies come to stand in as a sign for the future, simultaneously techno-oriental, alien, and invisible. In the introduction to *Techno-Orientalism*, David S. Roh, Betsy Huang, and Greta A. Niu expand on this futurity stating that “while Orientalism defines a modern West by producing an oppositional and premodern East, techno-Orientalism symmetrically and yet contradictorily completes this project by creating a collusive, futurized Asia to further affirm the West’s centrality” (7). The premodern/hypermodern is important to read alongside other binaries put forth between the human/nonhuman and free/unfree. While techno-orientalism as a concept seeks to think about Asia and Asians in relation to how racialization maps onto imaginations of physical space and machine-like bodies, specifically through thinking about the representations and imaginative constructs of modern

corporations moving labor abroad has also increased the participation of new immigrant women in the paid labor force in low-wage labor markets. Kang traces the growth of service sectors in global cities like nail salon work in New York City to think about how a gendered workforce changes through migration.

Asian spaces, I seek to center the temporality of women in technology's global economy by continuing to center the scholarship of women of color who were writing about the global factory in the early 2000s and the work of scholars that seek to think about how Asian women's material labor are essential, beyond just representations of *Bladerunner*-style techno-orientalism and posthumanism. As LeiLani Nishime writes of the representation of Asian bodies on film about technology's future, this transformation and prevalence of whitewashing, in particular, "enables science fiction films to imagine future technologies while disavowing the unequal transpacific labor practices that underwrite the production of those future technologies" (30). Representation and imagining the future as techno-oriental, colludes with imaginings of the coolie as taking over the United States through their nonhuman labor. However central to this project is the material realities of the labor conditions of women of color in the global factory and their movement, to draw attention the histories of militarized migration that laid the groundwork for technology's political economy—while simultaneously centering cultural production that insists on seeing otherwise.

Other scholars in the mid 2000s have thought about immigrant women in the global factory to expand on the intertwining of Asian bodies in relation to the development of technology itself and how it gets imagined. Wendy Chun writes of race in the future arguing that race is crucial in "conceiving cyberspace as a utopian commercial space. More precisely, conceiving race as skin-deep has been crucial to conceiving technology as screen deep" (129). She thinks about how images of an oriental future and disembodiment being guaranteed by Asian bodies, allows the narrative of the Internet as a future utopia, a disembodied cyberspace to exist. This too is reflected in Lisa Nakamura's *Cybertypes* where she discusses identity tourism and high-tech orientalism that dispense with the actual Asian body. Identity tourism depends on

tourists who “took their virtual experiences as other-gendered and other-raced avatars as a kind of lived truth” (14). Pointing to how the utopian posthuman form is narrated and placed onto Asian bodies, bodies that have historically been made nonhuman, shows how the figure of small, foreign, female is unique in this moment of technology’s development for the ways in which it is made posthuman/nonhuman to make labor invisible, to narrate the Internet as being disembodied, and to be made available for some bodies to appropriate or consume.

These forms of labor and global movement on the technological integrated circuit, famously theorized by Donna Haraway in “A Cyborg Manifesto,” points to how embodiment becomes complicated under global capitalism and information technology, where the very problems with the racialized and gendered workforce get translated into “languages of development and under-development, rates and constraints of modernization” (301). The process of being disassembled and reassembled, in these gendered and racialized terms are built into the economy of high-tech where the ways in which militarism has produced crisis and structurally created new markets, materials, and spaces for capital—intersects with the ways in which Asian women move through the world. However, I’m interested in some of the critical possibilities that emerge from what Haraway describes as the feminized ability to be disassembled and reassembled, in the set of tools that mark one as other, also having the capacity to recode and subversively communicate.²¹ By drawing attention to this particular racialized and gendered formation of small, foreign, and female, at a particular moment of increased technological growth, how can our reading of technology’s development and determinism, be reread to think

²¹ Haraway, Donna. “A Cyborg Manifesto.” *The Cybercultures Reader*, Routledge, 2007, pp. 291–324.

about who gets made into a technology, who produces that technology, and what range of thoughts and knowledge emerge from the space of the human and nonhuman?

In my tracing of Asian American racial forms from 1875 and 1882 through the Immigration Act and Nationality Act of 1965, scholars have noted the importance of Asian American cultural production in its capacity to elucidate a past that the United States must forget. My dissertation seeks to push this argument for the attunement to Asian American cultural production by specifically thinking about the ways in which it not only reveals what has been disavowed by what imperialism has made invisible, but through how it can be read alongside artifacts that continually are produced in making determining claims about the future. These claims to know futurity—aesthetically, anecdotally, and quantitatively—through technological fictions like MoMA’s exhibit, imaginations of the posthuman form, and Apple’s Progress Report, perpetuate a continual line of imperial violence. By clearing away understandings of technology’s past and ongoing practices of racial capitalism, the future is hegemonically speculative in the determining claims made about the future and the place for Asian women’s bodies within that future. The Asian American cultural artifacts that I read alongside these determinizing imaginings, engage with how legacies of racialized and gendered embodiment carry with it knowledge and alternative memories of technology’s story. These mutating and flexible forms, that are created by opening the category of small, foreign, and female, reveal the indeterminacy of any future of technological progress. They reconfigure technological development in relation to how it has historically relied upon racial capitalism and its forms such as small, foreign, and female in its need for labor and new capital markets. The restorative possibilities in the texts I read, center Asian American women in their capacity to simultaneously

point to a material history of technology, while also speculatively imagining new possibilities for the body in the future.

Chapter Outline

Each chapter investigates the emergence of small, foreign, female in different technological contexts or imaginations and bends and retrieves this figure through narrative in Asian American cultural production. My first chapter looks at two artifacts that are concerned with the microchip. The first is the Museum of Modern Art's (MoMA) exhibit "Information Art: Diagramming Microchips"—showcasing the microchip for its futuristic design and emphasizing the engineer's craftsmanship and inventiveness. The exhibit removes microchips from any physical space, making invisible immigrant women's labor by introducing it as contamination. Contrastingly, Janice Lobo Sapigao's book of poetry *Microchips for Millions* centers her mother, a Filipina immigrant woman by telling the story of her mother's work in Silicon Valley and pointing to the palimpsests of personal narrative that reveal the material conditions for the high-tech economy. I put these two artifacts in conversation with one another to question what it means to be simultaneously hyper visible and invisible in these forms of speculation. How can Asian American cultural production, as explored in Sapigao's piece, offer something else in the place of an uncontaminated future to rethink what futurity might mean when paying attention to the conditions of its existence? Focusing on the ways in which neoliberal forms of visibility have made Asian women's bodies invisible strictly as a source of contamination in the labor of creating microchips, I question the terms of representation to draw attention to the material conditions of women of color in the global factory. The small, foreign, and female in this chapter experiences changes in technology through immigration and the ways in which bodies undergo

the changing conditions of Silicon Valley. Troubling the terms of technology within a context of post-1965 immigration in Asian American cultural production opens the question of who and what is being contaminated, by insisting on expanding outward from hands for bodies to exist beyond the racializing exploitative systems in which hands get made nonhuman.

My second chapter reads two short fictions by speculative fiction writer Aliette de Bodard, “The Waiting Stars” and “Immersion”, to discuss how embodiment and posthumanism are understood as liberatory possibilities for technology’s future. The texts subvert and engage with cultural tropes of techno-oriental futures where Asian women are configured as feminized robots to create room for agency in this nonhuman state. My close reading focuses on the ways in which the stories critique imperialism and its violent production of varying racialized and gendered genres of the human. I focus on the gendered labor of intimacy that takes place in future worlds that are purported to be liberatory because of new technologies of embodiment, and the ways in which technology reinforces existing racial hierarchies and gendered intimate labor. Movement in this chapter is operative in the ways in which migration for refugees is construed under imperialism as benevolence for those seeking refuge. However, the perspectives of women throughout the story reproduce the small, foreign, and female to argue for the ways in which kinship formations become a site of possibility and resistance that emerge from alternate understandings of what embodiment might mean. This possibility leads to bodies expanding speculatively into space, envisioning alternatives to the techno-oriental posthuman.

My third chapter focuses on Apple’s annual Supplier Responsibility Progress Report and Lisa Ko’s novel *The Leavers* to explore time and disavowal. The Progress Report narrates futurity in terms of improvement toward a more ethical supply chain that centers the rights of the people in its factory and the environment through an insistence on its concern for Asian women

working in the factory. However, I read this corporate guarantor of accountability as speculative. Contrastingly Ko's novel that centers Chinese immigrant women's labor, deportation, adoption, and transnational capitalism employs speculation to offer a phenomenological account of how Asian immigrant women experience life within these systems. It is through a reading of the novel's central question as speculative that we can trouble the totalizing formation of small, foreign, and female in the Supplier Responsibility Progress Report as being one strictly related to questions of quantitative accountability, development, and liberal personhood. I argue for a relation to temporality that makes apparent the connections between the racializing and gendering structures of the local and the global—where time isn't constructed as progress but rather a continuous line of violence in the intertwining of technology and global empire. Small, foreign, and female here operates to draw attention to how each of those descriptive adjectives gets reconfigured and stratified in varying geographic sites. It is through movement between spaces that the fictions of development and liberalism are revealed and new opportunities for what agency looks like emerge.

Finally, I conclude by returning to the story of my halmoni again and the embodied experience across generations of women in my family of small, foreign, and female. I read a set of family photographs to think about what might emerge from a speculative looking that opens space and creates new possibilities for the body to expand outward. Suturing together these pieces of family ephemera provides an example of how we might engage in a politics of care as we transform the embodied experiences and memories of small, foreign, and female across generations.

Conclusion

The stakes of the speculative women of color feminist reading practice I have outlined are best elucidated in a recent *Vanity Fair* article by R.O. Kwon. In “A Letter to My Fellow Asian Women Whose Hearts Are Still Breaking,” Kwon reflects on the Atlanta spa shootings and an upsurge in anti-Asian attacks and violence through the COVID-19 pandemic, by addressing the breaking hearts of the community she creates through her reflections.

Acknowledging the vast differences of the group of Asian women she is speaking to and the impossibility of ever speaking for a collective “us,” Kwon still speculates on what this collective might mean by first recounting her experiences of being a Korean American woman, first being “specific about the body I inhabit” (Kwon). From this account, she moves to reflect on the ways in which Asian women get mistaken for one another, racialized as similar even through difference. In the case of the Atlanta spa shootings this shared racialization becomes a violent vision that sexualizes Asian women’s bodies, through histories of imperialism and colonialism, turning them into a “temptation” that justifies violence. However, Kwon turns this racial vision into a narrative of community through women of color politics where she proclaims to “love being in this company—I love it here, with my sisters. I always have, and there’s not anywhere else I’d want to be” (Kwon). The dehumanizing vision of small, foreign, and female here is speculatively turned into a reaching outward of care for one another, a care that Kwon thinks about as devotion, but also a simultaneous heavy burden one must live with. It is through an account of her own Asian American racial and gendered formation that Kwon reaches outward to think about systemic injustice.

Closing the piece by recounting a conversation with writer Ingrid Rojas Contreras about women of color, she recounts that Contreras “said, in a moment that felt like a cloud breaking,

like clarity, ‘We matter to me.’ You matter to me, we matter to me, and I would so much rather have us and our allies on our side than any of them. For we already belong” (Kwon). Speculative visions for women of color becomes an act of care, of sitting with one’s own experiences of embodiment, and turning that knowledge outward to offer a different temporality of experience. For Kwon, this new space sees Asian women’s bodies outside of the ways in which they have been relationally positioned as hypersexual and exploitable, and instead reorients this form of racialization that exists in relation to whiteness, toward other bodies. Rather than bodies relatable and made visible under the logics of capitalism, bodies are reconfigured in relation to other kinship networks, outside of liberal humanism, that emerge with them new possibilities for collective community and care.

I end with the example from “A Letter to My Fellow Asian Women Whose Hearts Are Still Breaking” because it returns to some of my initial points of inquiry around small, foreign, and female in texts like *Salt Fish Girl* and my halmoni’s story. As racialized, gendered embodiment exists in diverse spaces—the Island of Mist and Forgetfulness, in post-war Korea and the United States, and in a climate of anti-Asian racial violence—small, foreign, and female moves through the world and challenges the temporality of progress through new orientations to embodiment and its making speculative of technological determinism that produces itself as totalizing and invisible in its inevitability. Personal narrative and positioning reveal the speculative desires and visions of women of color to think not only through the question of “what if” but also “what new formations might be.”

CHAPTER ONE

The Temporality of Labor and Contamination in *Information Art*

Diagramming Microchips and Janice Lobo Sapigao's *Microchips for Millions*

In the center of Hudson Yards, the newly formed real estate development on the west side of Manhattan's midtown, sits The Shed. New York's new cultural center for the arts states its mission is to “produce and welcome innovative art and ideas, across all forms of creativity, to build a shared understanding of our rapidly changing world and a more equitable society” (The Shed, *About The Shed*). The center prides itself on inclusive access to the arts for New York City, despite having been developed as part of Hudson Yards—what has often been called the newest “billionaire's playground.” One of the most recent shows at The Shed, *Fragile Future*, was put on by the immersive art studio Drift, founded by experiential artists Lonneke Gordiin and Ralph Nauta. One of the exhibits in the immersive rooms, titled “Materialism: A Sculpture on Reversed Engineering,” presents a series of reverse engineered sculptures that reveal the composition of everyday objects like iPhones, bikes, and Starbucks cups as a series of blocks—proportionally scaled to size based off the quantity of raw materials within the object. The exhibit intends to draw attention to resource extraction to consider objects outside of their use value. The statement highlights the contexts from which raw materials are sourced, stating that consumption reinforces “complex systems of resource extraction, labor, manufacturing, and distribution” (Studio Drift, *Materialism: A Sculpture on Reverse Engineering*) and asking the viewer to increase their awareness of consumption to “become better stewards of the future” (Studio Drift, *Materialism: A Sculpture on Reverse Engineering*).

Under the titles “iPhone 4S, 2018” and “Nokia 3210, 2018” two phones are broken down for the raw materials that comprise them into neat boxes, with descriptions that list materials such as glass, stainless steel, aluminum, silicone, gold, silver, and nickel among others (Figures 1 and 2). Two other pieces strikes me as I walk through the exhibit, what looks like a small rectangular tower and an identical but much larger tower. According to the description both are made of multicrystalline silicon (Figures 3 and 4). Above the name of the raw materials, the title card states the smaller object is “the Internet from 2000, 2021.” In parallel, the larger tower states that the multicrystalline silicon is representative of “the Internet from 2020, 2021.” These blocks according to Nauta were created by calculating the weight of electrons running through the internet on specific dates.²² Silicon is the core material behind the production of semiconductor devices that run computations on computers through the electronic switches they perform. Silicon, how Silicon Valley got its name, is behind the development of transistors small enough for microchips. This jump in size of the towers, demonstrated through the quantity of silicon, draws attention to the Internet’s omnipresence and our increased dependency on the materials and technology behind it—invoking the title of the exhibit *Fragile Future*. However, despite the exhibit pointing in the description to the systems of resource extraction, labor, and

²² See: Kane, Peter-Astrid. “What Are the Raw Materials in Your iPhone, Starbucks Cup and Bike? – in Pictures.” *The Guardian*, Guardian News and Media, 3 Nov. 2021, <https://www.theguardian.com/artanddesign/2021/nov/03/art-shed-materialism-fragile-future-technology>.

manufacturing that put forth these raw materials, the exhibit fails to mention these intangible forms again, unable to make visible the abstract dimension of racialized labor behind these materialisms from the process of resource extraction itself to the assembly line. This unsaid presence in the discussion of the materiality of technology, gets made invisible in the turn to aestheticize these materials. The audience is encouraged to think about materials and objects, neatly in cubes, away from the racialized and gendered labor that carries these objects, within the most expensive real estate development in the entire history of the United States.

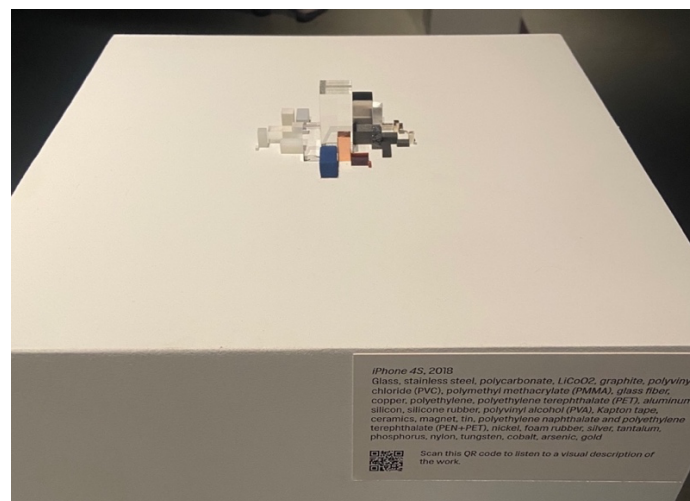


Figure 1

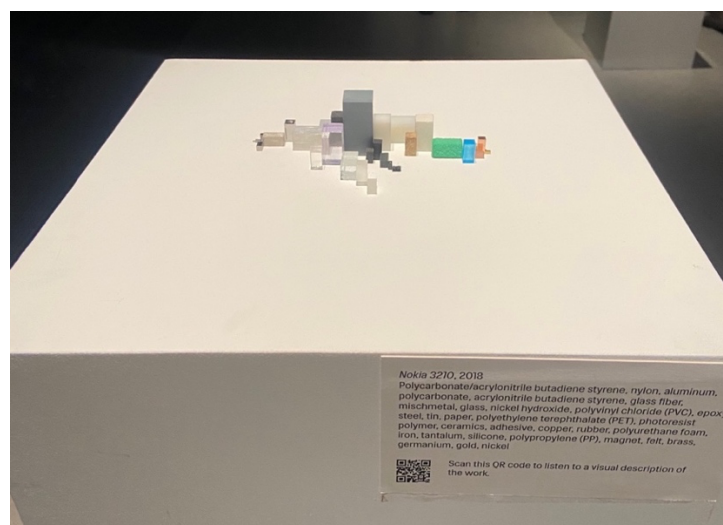


Figure 2

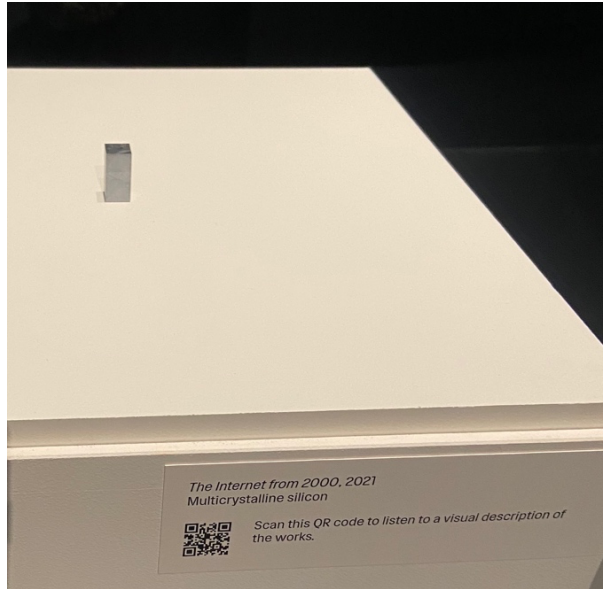


Figure 3



Figure 4

This chapter begins in conversation with the idea of materiality in *Fragile Futures* and intervenes in the construction of small, foreign, and female in the manufacturing of microchips to break down the racializing assemblage²³ that structures and disciplines to extract labor for the process of turning silicon into semiconductors. In Aihwa Ong's examination of Malaysian manufacturing work, she reveals these patterns of gendered and racial domination and subordination where transnational corporations rely on the control of workers' bodies that structure factory relations and the way women see themselves as subjects. The feminization and racialization of labor in high-tech manufacturing, designates the Asian women's body as more naturally suited to tolerate the excruciating labor that goes into producing technology. However, in *Fragile Futures*, the small, foreign, female is never mentioned throughout the exhibit, as the aesthetic turn toward technology, fails to account for the materiality of objects. How do we then re-read Asian American cultural texts into exhibits and spaces that seek to enact a sterile aesthetic of clean futurity that disavows materiality? I center Asian women in the global factory to make visible some of the material conditions that surround technology's politics of disavowal and obsession with futurity, instead centering women of color speculative visions grounded in a new kind of materiality.

I look at two artifacts that are concerned with the production of the microchip. The first being the Museum of Modern Art's ("MoMA") 1990 exhibit *Information Art: Diagramming Microchips* and the corresponding catalog showcasing the microchip for its futuristic and intricate design, highlighting its functionality. The head curator for the exhibit, Cara McCarty,

²³ See: Weheliye, Alexander G. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Duke University Press, 2014.

suggests that an aesthetic eye pointed at the microchip is also one invested in looking toward the future. The exhibit, funded by the Intel Corporation Foundation, traces the impact and historical development of the microchip the engineers responsible for the design of semiconductors, become artists through an emphasis on their craftsmanship and hand-drawn designs. However, my analysis of the exhibit points out that the future being built and imagined is one made possible through obfuscation of the microchip's production. I suggest that immigrant women's labor is not discussed explicitly throughout the exhibit, like *Fragile Futures*, yet its presence is made hypervisible in the discussion of the manufacturing process of the microchip and the obsession with a "clean" production environment for silicon transistors.

Contrastingly my second artifact, Janice Lobo Sapigao's book of poetry *Microchips for Millions* centers Filipino immigrant woman by telling the story of Sapigao's mother and her work in Silicon Valley. Sapigao's poems, "The Clean Room," "The Person," "The Praise," and "The Source" trouble the idea of progress by rethinking what it means to be contaminated. Opening the category of small, foreign, and female to denaturalize the way it has been racialized, gendered, and coded to justify the exploitative economy in tech, Sapigao's poems point to the palimpsests of personal narrative that reveal the material conditions for the high-tech economy. She thinks about the clinical language of cleanliness and sterility in terms of the microchips production, also used by McCarty, to trouble what and who is really being contaminated. I argue that these personal narratives and histories point to the ways in which the Internet, rather than being something formed from decontextualized silicon, emerged out of Cold War militarism and the transnational labor of women of color impacted by its violences. Asian American cultural production like *Microchips for Millions*, insists on seeing the development of technological industries alongside the places and people that have been changed and exploited through

capitalist accumulation. This engagement with cultural artifacts draws attention to the environments, economies, and experiences of the spaces we move through and imagine—insisting on materiality in the way we conceive of abstract progress and development in the technological goods we consume and our understanding of the future.

My chapter interjects in aesthetic notions of contamination, as racialized and gendered bodies rendered as excess, and cleanness in the semiconductor factory not only as a sterile work environment but as aligned with Western notions of beauty and civilization. I first discuss histories of contamination in relation to Asian American history to trace how Asiatic racial form as an exploitable labor force, emerges in relation to seeing the Asian body as a site of contamination and cheap labor. This transformation is what Iyko Day argues is the abstract dimension of value formation where hyper efficiency alongside contamination is imagined as the opposition to romantic anticapitalism.²⁴ This notion of value formation sees Asian women's labor as temporally subsumed within capitalist production. I argue that this notion of temporality and contamination makes Asian women's bodies invisible in *Information Art: Diagramming Microchips*, yet the bodily racialized presence is alluded to everywhere in the exhibit, despite appearing nowhere. The exhibit instead creates a connection between the masculinized, valued, and artistic labor of the engineer and the microchip, to elevate the status of the object, designating it as high-tech. This narrative of the future allows corporate partners like Intel to also imagine their technological dominance over the way they seek to accumulate capital and exploit and extract from new globalized supply chains and markets from a clean environment that

²⁴ See Day, Iyko. *Alien Capital: Asian Racialization and the Logic of Settler Colonial Capitalism*. 2016. Print.

becomes aesthetically elevated. I put forth Neferti Tadiar's understanding of the female body as never being inseparable from time to read times of "waste" or disavowal²⁵ in *Microchips for Millions*. In contrast to the abstract dimensions of value that temporally sees Asian women's bodies as contaminants within capitalist production, I read *Microchips for Millions* for the ways in which the poems draw attention to disavowed time and free time. These moments render Sapigao's mother's life in and outside of the home within larger contexts of militarized migration and exploitation.

Finally, my readings of contamination and cleanliness are operative around the presence of hands. Hands appear in *Information Art: Diagramming Microchips* or in other descriptions of the semiconductor clean room as sources of contamination, feminized and removed from the body. Like the breaking down of the body into categories like small, foreign, and female, hands become an appendage that must labor to produce technology while not having any agency to move freely or be seen as a site of contamination. However, texts like Sapigao's return hands and reconceive of them as having the capacity to reach for something else. Hands that draw attention to the lives they support and what they carry, returning them to the women they belong to. Drawing larger contexts around hands and the histories they carry, as well as the forms of intimate labor they perform, allows for an interjection in a "clean" future, not as a site of contamination, but reintroduced as a site of possibility for expanded notions of technology that are simultaneously accountable for and holding of its disavowals.

²⁵ See Tadiar, Neferti Xina M. *Things Fall Away: Philippine Historical Experience and the Makings of Globalization*. Duke University Press, 2009.

The Temporality of Contamination in Asian American Studies

In MoMA's exhibit *Information Art: Diagramming Microchips* the racial and gendered makeup of semiconductor manufacturing operatives is never discussed or made visible yet in its description of production contamination is frequently mentioned. The necessity for creating a sterile work environment, free from human contaminants, paints an image of a process of production that requires a strong attention to detail and an obsession with perfection in the fabrication of each microchip. When hands in the manufacturing process are mentioned, they are discussed in terms of their capacity to contaminate. However, when hands are described in the design and engineering stage, they are praised for their creative ability and artistic craftsmanship. Contamination in relation to craftsmanship in *Information Art: Diagramming Microchips* seeks to make immigrant women's bodies a site of contagion, a continuation of a long history of making labor cheap to elevate the commodity.

A history of seeing the Asian body as a contaminate has been explored in relation to fears of yellow peril and biological contamination, as well as economic takeover. The racialization of Chinese labor in the United States was tied to changes in the global economy where anxiety was displaced onto the Asian body, ultimately leading to the 1882 Chinese Exclusion Act. Central to this racialized construction was the Asian body, seen as an alien form for its purported mechanization and capacity for abnormal productivity and efficiency. Rather than thinking the presence of the Chinese in America was symptomatic of industries that exploited cheap labor, creating the racial imaginary of the "coolie" from the age of emancipation,²⁶ Chinese labor was

²⁶ See: Jung, Moon-Ho. *Coolies and Cane: Race, Labor, and Sugar in the Age of Emancipation*.

Johns Hopkins University Press, 2006.

racialized as nonhuman to explain why Chinese workers were accepting lower wages than white laborers. As Eric Hayot argues, the obsession with the dehumanization of the coolie's body as one that could endure constant pain, low wages, and deplorable living conditions, centered the coolie's labor as one that could produce quantity over quality, representing "the faceless mass over the individual, and of mass production over unalienated, organic labor" (103). The biological transformation of the immigrant body signified for white America the mechanization of the United States, the coolie's presence suggesting a dystopian future. Colleen Lye sees this mechanization and contamination of the Asian body as demonstrative that race, rather than being a human concept, is an economic one. Lye points to yellow peril and the Asiatic racial form as the "intensification of commodity relations and capital's global expansion" (10) where shifting immigration policies reveal more about transnational capitalism than the stability of racial categories. Here, the dehumanization of the othered racial body, comes to represent difference to disavow racial capitalism. This centers the United States as a place of opportunity, a place where immigration policies account for the presence of the Chinese either within narratives of exclusion or assimilation.

The biological transformation of the Asian body as one that represents mass production through contamination has a specific history in the Bay Area, perhaps geographically aligned with the ways in which immigrant labor gets narrated in relation to Silicon Valley. Nayan Shah specifically accounts for the ways in which San Francisco's Chinatown was positioned in the late 19th century as a contaminated and dirty space, where the spatial and racial boundaries of Chinatown were policed by obsession with the neighborhood as being infectious. Shah argues that white identity is stabilized in relation to the ways in which public health changed during this time, placing white norms of cleanliness onto Chinatown that transformed the space as uncleanly

into one that was deserving of medical benevolence. Shah states that the gender and sexual spatiality of Chinatown, in relation to narratives of the Chinese as being solely bachelor societies where women were prostitutes, coalesced alongside a policing of citizenship.²⁷

This narration of Asianness standing in for contamination, translates to the ways in which goods produced from Asian labor are often seen as “dirty” or “cheap,” tying objects to racialized bodies. In *Alien Capital*, Iyko Day elucidates the ways in which the Asian body has come to personify “abstract processes of value formation anchored by labor” (8). Asianness comes to be seen in stark opposition to romantic capitalism. Based on Marx’s definitions of socially necessary labor time, romantic anticapitalism imagines a relationship to the production of goods crafted with skilled labor that places itself in opposition to modernity. Romantic anticapitalism sees economic efficiency and the new industrial processes of production as unnatural. Marx’s socially necessary labor time in relation to romantic anticapitalism, sees the measure of a commodity’s value in relation to the average degree of skill and intensity of labor in a given society needed to produce an object. If the market for a commodity is oversupplied, then labor time has been expended and exchange value falls, in this case racialized Asian labor and the labor time expended that is in excess of what is socially necessary becomes cheap alongside the goods themselves. If the market however is undersupplied then labor is seen as less than what is socially necessary, and value rises.

Romantic anticapitalism propels this understanding of commodities at odds with the abstract dimensions of labor, racializing and creating a false binary that offers “an ideological

²⁷ See: Shah, Nayan. *Contagious Divides: Epidemics and Race in San Francisco's Chinatown*. University of California Press, 2001.

framework for settler colonialism to respond to economic and technological crises by imagining whiteness through indigenizing tropes of purity and organic connection to land that function to distort and deflect responsibility for capitalist modernity” (Day 36-37). An imagination of purity in relation to labor and goods being closer to nature places itself in contrast to the feminization of factory labor. Rather than reading this excessive efficiency in relation to new supply chains that separate elements of production to deskill the labor and make the labor exportable to export-processing zones, production speed is attributed to the excessive efficiency of racialized and gendered bodies themselves rather than the excessive processes of capital accumulation.

To return to the ways in which contamination aligns with Asianness coming to represent surplus labor, racialized as mechanization capable of laboring under extreme conditions and for longer durations, Day elaborates in “The Yellow Plague and Romantic Anticapitalism” the ways in which this imagination aligns with Asians as scapegoats for disease. Asians as viral transmitters, as Shah also argues, is part of an ideology of settler colonialism and romantic anticapitalism where the inscrutability of Asianness that translates to the “abstract qualities of the virus, analogous to the immaterial circuits of capital, that merge to produce a toxic cognitive mapping of race, disease, and crisis” (Day 3). Here the hyper-efficiency placed onto Asian bodies gets aligned with feminization and contamination that makes certain bodies nonhuman, narrating their thingness alongside the objects that circulate.

Information Art: Diagramming Microchips imagines the microchips future in terms of a romantic anticapitalism that interpellates the engineer in the Silicon Valley of the early 1990s into an artist. By establishing the relationship between the hand-drawn designs of the semiconductor layouts and the materiality of the microchip itself, the political economy around high-tech capitalism becomes invisible through notions of contamination. While Day explores

how the invisibility gets abstracted and turned into a visible Asian subject that is seen as mechanized and cheap, this figure gets produced in *Information Art: Diagramming Microchips* as a contaminating non-presence. By elevating the status of the engineer as an artist in relation to the creation of semiconductors, corporations like Intel elevate the status of technological goods as high-tech and advanced technology, justifying the high price of personal computers and furthering the narrative that a semiconductor, produced in excess of socially necessary labor time, maintains its status as a rare commodity. This elevating of the status of the engineers has historically been central to the masculinization of technology that posits forth the figure of a creative, singular genius, and rugged individual as the creative inventor of high tech.²⁸ Here defining what gets considered high-tech and who produces that technology, defines what brings us into the future and what technological progress looks like. The formation of the engineer alongside the goods they produce, while not explicitly naming women of color in the global

²⁸ Nathan Ensmenger discusses the subcultures of computing that discouraged female participation through cultural representations of computing, a profession previously dominated by women, as requiring uniquely masculine characteristics. The insecurity of the changing gender roles of the field was dealt with by changing the occupational status as being feminized and straightforward work to “reframe the occupation as being active, creative, and unpredictable” (Ensmenger 47) to align masculinity with authority. See: Ensmenger, Nathan. “‘Beards, Sandals, and Other Signs of Rugged Individualism’: Masculine Culture within the Computing Professions.” *Osiris*, vol. 30, no. 1, The University of Chicago Press, Jan. 2015, pp. 38–65.

factory, makes invisible their presence throughout by carefully disavowing the low-wage labor through a trope of contamination. Specifically, hands through *Information Art: Diagramming Microchips* get turned into a source of contamination for everything they touch, needing to be sealed away in a hazmat suit and layers of gloves to prevent putting the microchips at jeopardy. Despite never mentioning or visually representing race, *Information Art: Diagramming Microchips* reintroduces the body in terms of its capacity to contaminate.

However, how is it that all the designing by hand creates craftsmen out of engineers and the manufacturing by hand gets made invisible? The gendering and racializing of immigrant women's bodies as small, foreign, and female whose hands are central to justifying exploitation, suddenly becomes invisible. In Minh-Ha Pham's exploration of personal style blogging and Asian factory labor, she notes the ways in which this labor is deskilled and devalued in its gendering as women's work. This has the effect of minimizing the expertise of both types of labor by devaluing Asian fashion work as cheap.²⁹ This furthers my previous discussion of one form of hypervisible invisibility, where the work and material goods produced by women of color are on display and made visible, yet the gendering and racializing of their labor gets normalized through its invisibility as feminized. Small, foreign, and female becomes abstracted as a racializing assemblage, one that becomes an object alongside the goods produced while being produced from categories of racialization. One can see this through the way their hands and labor get mentioned in terms of contamination where hands become parts unattached to people but exist strictly within the conditions they are designed to labor within.

²⁹ See: Pham, Minh-Ha T. *Asians Wear Clothes on the Internet: Race, Gender, and the Work of Personal Style Blogging*. Duke University Press, 2015.

After highlighting the design work that goes into microchip layouts, the curatorial statement goes into describing the integrated circuit as a tiny piece of sand. Silicon is described as an abundant element that requires control and manipulation to its structure to produce it as an insulator or conductor. Then it discusses the process of etching circuit designs onto silicon wafers, layer by patterned layer of different materials, leaving little room for error. The capacity for human error and the damaging of chips, even by dust, in the production phase, means that “fabrication is performed in ‘clean rooms,’ where the air is continually filtered by a purity far exceeding that in hospital operating rooms” (McCarty 10). Because of this:

workers cannot wear makeup or jewelry and are required to put on protective clothing resembling space suits to prevent dust, lint, dandruff, and other bodily particles from falling onto the wafers. In the most advanced facilities, workers are completely enclosed within suits equipped with breathing apparatus. (McCarty 10)

This discussion of the worker as contaminant is the only mention of the manufacturing operative work or worker throughout the exhibit. The imagery of the suit brings forth the body of the assembly worker as contaminant rather than what is in danger of being contaminated. For example, in the early 1990s it was shown that there was a doubling to tripling of miscarriages for exposed women due to the toxic chemicals widely used in chipmaking and Santa Clara County would eventually be designated as having more hazardous waste sites than anywhere else in the United States. By 1995, IBM pledged to rid the use of these chemicals. However, with the outsourcing of manufacturing jobs, these changes show to not have been or inconsistently

implemented in Asia.³⁰ Here, the body is made invisible and turned into a problem of manufacturing logistics to be handled. Hypervisible invisibility works here to think about the worker in terms that don't contextualize their labor or identities in their own words or in other ways of thinking about history, but strictly in terms of how their hands can contaminate. This varies greatly from thinking about the hands of engineers, artists who touch an object and inspire innovation and greatness for what is to come after it. Specifically, this illustration of the contaminant is also gendered in the description of the body as wearing makeup or jewelry. Despite not mentioning the feminization of the labor, the exhibit points to the traces of its gendering as a contaminant through what the body wears.

The Aesthetic Turn Toward the Microchip

In the fall of 1990, the Museum of Modern Art in New York City showcased their exhibit *Information Art: Diagramming Microchips*—the first exhibit to think about the microchip in terms of its design. The exhibition featured 31 designs of 22 circuits, along with chips themselves that highlighted the computer-assisted, unintentional creation of art, that began with the invention of the microchip in 1958. The exhibit and corresponding catalogue—written by associate curator of Architecture and Design, Cara McCarty—included designs from AT&T Bell Laboratories, Hewlett-Packard, IBM, Intel, and Texas Instruments among others. The catalogue

³⁰ See: Simpson, Cam. “American Chipmakers Had a Toxic Problem. Then They Outsourced It.”

Bloomberg.com, Bloomberg, 15 June 2017. www.bloomberg.com,

<https://www.bloomberg.com/news/features/2017-06-15/american-chipmakers-had-a-toxic-problem-so-they-outsourced-it>

displays a series of designs that center the integrated circuit. Made up of tiny silicon transistors, first invented in 1947, the integrated circuit is designed to create electronic pathways to form a microchip. The exhibit highlights how silicon chips initially contained only a few transistors, but the movement towards things like miniaturization, performance, efficiency, and speed has led to a single chip with a billion transistors. The designs that run through the catalogue are focused under the categories of logic, memory, microprocessors, application-specific, and neural nets. It traces the history of design and the microchip starting with its initial capacity to store information, then thinks about its development for programmability for application-specific purposes, and finally culminates in the chip's "future" of the time for mimicking the function of the human visual system for Artificial Intelligence. This development is accompanied by colorful visual depictions of the growing complexity of the microchip and the movement from early hand-drawn designs to computer-generated plots that can be easily mass-produced.

However, one of the most striking parts of the exhibit catalogue is the way that it narrates the collection and frames its exploration of microchip art as one invested in defining the future. I focus specifically on the framing introduction of the catalogue that works to imagine and give form to the future, stating early that "technology does not have a form—we give it one, and integrated circuits are among the most highly designed and exquisitely crafted artifacts of our civilization" (McCarty 10). The alignment with technology's future as being imaginable and formless, only to be given form through art, suggests the importance of speculation in the way the underwriters of the exhibit demanded the story of the future gets told.

After leaving MoMA the exhibit took a seven-city tour throughout the United States, one of the destinations being the Triton Museum in Santa Clara. The exhibit's movement throughout the United States, using MoMA's institutional power to authenticate microchip art, speaks to the

importance of creating and building a future that highlights the economic and social impact of the semiconductor. The Intel funded exhibit makes Silicon Valley the center of the story of not just science, but humanity. This investment in creating a dominating worldview of the future by aligning aesthetics with technology's development, legitimizes and upholds the manufacturing processes of the parts which are displayed. An artist is made from the engineer; the future is aligned with speed, efficiency, accessibility, and miniaturization; and Silicon Valley is the center of it all through its history of microchip manufacturing. However, this very project of fashioning what the future of technology's development is, operates under a series of disavowals, pushing forth a certain speculative future by making invisible the material conditions of the political economy surrounding the development of technology. Certain bodies become designated as craftsmen, central to the aesthetic project, while others are made further invisible through imaginations of mechanization; a push towards the manifest destiny of future efficiency, hides the way technology gets produced to make this future a possibility; and the history and impact of the microchip going forward gets spoken about in terms of innovation, but hides the militarized history of development and uses.

When *Information Art: Diagramming Microchips* landed at the Triton Museum in Santa Clara, one local newspaper's account of the opening exhibit immediately called on the:

unappreciated Silicon Valley engineer -- any of you who've ever been called a drone, propeller-head or a nerd because you make an honest living sitting all day at a CAD terminal churning out semiconductor schematics: it's time to hold your head a little higher. And while you're at it, slap on a beret. Those weren't just microprocessors or memories you were designing. Chances are, they were also museum-quality fine art. (Gomes)

The public circulation of the exhibit and the framing within the catalogue show how part of the task of thinking about the microchip as art, involves defining the engineer as the inadvertent artist. As can be seen in the newspaper excerpt, the engineer's status was identified as unique, integral to the economy through the "honest living" being made, and then elevated to the status of artist, a purveyor of Western civilization and culture. The ability to interpellate a set of "unappreciated Silicon Valley" engineers into master craftsmen of a modern aesthetic and intellectual project has the effect of centering forms of subjecthood available to a majority white, male, middle class and disavowing the more precarious and labor-intensive work of immigrant women performing semiconductor assembly work. Nowhere in the document is there mention of the gendered and racial logic of who makes up this labor force. However, by centering and narrating the engineer as craftsman, the immigrant women's racialized labor becomes normalized through the way it is made invisible, and therefore further exploitable.

Furthermore, the way the microchip becomes historically situated within Western civilization in the curatorial statement and aestheticized into a beautiful and functional object to be admired, cuts off any possibility for other histories of the microchip's military development. This aesthetic procedure for affording recognition in the currency of proper aesthetic judgement, a specific performance within a museum, is what Kandice Chuh points to as an ability to make proper judgments around truthful beauty that is fundamental to Western modernity and the idealized liberal subject. This aesthetic sensibility runs in contradiction to politics or materiality, like the decontextualized materialisms of the aforementioned *Fragile Futures*. Chuh interjects in this system of affording recognition and legitimacy to certain ideas over others, by calling into question the disavowals of judgement in this hierarchical system, arguing for "the presence and potential of alternatives to liberal humanist onto-epistemologies that give rise to the narrow

definition of the human around which the modern condition has been organized” (3). This very act of looking and the collective judgement that an audience enacts in seeing the engineer as an artist, organizes these objects farther away from the hands that makes them. Any future function of the microchip strictly gets spoken about and visually depicted in terms of its capacity for speed and miniaturization, further disavowing the material conditions of its production and constructing a future that refuses to think about how the exploitation of Asian immigrant women’s labor is made possible through the militarized economy of high-tech manufacturing.

The catalogue initially sets up the exhibit as one that is invested in the microchip and uncovering its concealed capacity for wonder and beauty. McCarty’s curatorial statement states that “beauty is not restricted to the fine arts or to useful objects but can be found in functional machine parts and tools as well” (4). The task of searching for beauty is given to the spectator, who looks at the objects, not for its military history of development or the intensive manufacturing work that went into its assembly, but for the goal of finding beauty out of function. These aesthetic features can be found in:

the texture of the lines, intrinsic spatial features, delicacy, repetitive detail, and colors create sumptuous patterns that have the same power to inspire and intrigue us as some of the best paintings of our time. They are patterns for delectation; we can take pleasure in them even if we do not understand the technology. (McCarty 10)

McCarty’s statement sets the viewer up to accumulate a certain amount of cultural capital if they are successfully able to see the patterns of the microchip and historicize them amongst the “best” paintings of our time. Temporally, McCarty sees the microchip as being part of a lineage of grid design that is a format “used for centuries by many civilizations as a compositional device to

impose order, discipline, and structural clarity...an ordering principle consistent with our way of thinking, reading, and organizing information” (6). The viewer places the exhibit and the microchip as the natural succession to the grid designs referenced. The examples given show grid designs being traced to cave paintings in France, the Chinese character for “field,” the Roman city of Timgad’s aerial plan, the German painter Albrecht Dürer’s *Melancholia I*, the Dutch architect Jan Vredeman de Vries’ architectural grids, and the works of Dutch painter Piet Mondrian, among other examples. These examples highlight a Western-centric way of thinking about cultural progression. These ways of thinking about grid design in relation to the microchip has the effect of historicizing its invention as being one that was inevitable because of the way Western civilization has progressed. The thinking that collapses beauty and design with Western culture, is further dehistoricized when the curatorial statement initially introduces the origins of the microchip as resulting from a “rare, pivotal moment[s] in history when discoveries in all the major science-chemistry, physics, mathematics, optics, and electrical engineering-converged, and combined with a culture ready to implement the technology” (McCarty 4). This moment is briefly mentioned to have progressed since the end of World War II, where “developments in technology have produced objects, seldom seen by the public” (McCarty 4). This understanding of science and technology as just a set of disciplines that came together at the perfect moment to implement technology for mass consumption makes invisible the way technology is militarized.

McCarty attributes the “rare” moment in history, post-World War II, to an artistic sensibility that emerged in a happenstance fashion. However, as Margaret O’Mara points out in her contextualizing of Silicon Valley’s technological dominance, the state of California was the biggest recipient of federal spending during World War II, where there was a:

cognitive dissonance in the way America's postwar politicians and technologists talked about the world-changing upsides of high-tech investment—expanding frontiers of knowledge, pushing out into the unknown, bettering society, furthering democracy—and the far more bellicose and disquieting reasons that this investment happened in the first place. (23)

This increased spending on high-tech for military research, was agreed to amidst the backdrop of the Cold War. It was these sets of conditions that allowed William Shockley of Bell Laboratories to invent the silicon transistor. From this venture he went on to form his own company, where the engineers he hired then formed Fairchild Semiconductors and later Intel. O'Mara's historicizing of the development of the silicon transistor brings light to the way microchips were initially “meant to scale up the Cold War's ‘products of ‘intellect’ to market-disrupting proportions” (39) for the public. These inventions are grounded in Cold War anxieties of containing the threat of communism, justifying militarized violence and interference throughout Asia. Perhaps it is no coincidence that William Shockley later went on to espouse his agenda of racial eugenics from the 1960s onward. All these ventures, emerging from the military spending on technology in the Valley and in universities, are featured participants in *Information Art: Diagramming Microchips*, guiding the direction the exhibit took. Thinking about the microchip in terms of its iconic design and cultural impact in this case serves to erase the disquieting reasons for the development of microchips, and perhaps their aesthetic development as well.

The temporality of the microchip gets confined in the exhibit, not only in its way of thinking about the past, but in the way the exhibit visually depicts and thinks about development and futurity. The visual depiction of microchip development and the curatorial statement, demonstrate an obsession with miniaturization and speed related to technology. The statement

foregrounds the exhibit by saying that “as a culture we are predisposed toward speed and efficiency, and microchips have greatly increased our expectations” (McCarty 6). Because of the microchip’s size and the unexpected speed and processing power that comes with it, a certain degree of amazement is brought upon the spectator who marvels in its capacity to do so much with so little. Microchips are created from sand that is turned into the semiconductor silicon, in multibillion dollar fabrication plants or “fabs.” Before being created, engineers design representations of transistors that connect the flow of electricity through the chip to achieve maximum efficiency and speed. The more transistors that they can design on the smallest possible chip, the more enhanced and efficient the performance. In the production phase, microchips are made in clean rooms where the air is strictly filtered so a single speck of dust doesn’t disrupt the production process. The fabs are sawed into wafers where they undergo the process of lithography after being layered with a nonconducting layer and covered with photosensitive chemical. Lithography involves burning patterns from sometimes hundreds of layers of material, through UV light. Three dimensional landscapes made from exposed and unexposed material replicate the designs created, repeating the etching process to create paths between components of the chip, and then overlaid with a thin layer of aluminum. This production happens in factories that cost around 15 billion dollars to set up with specialized equipment, only to become obsolete within five years. These factories run 24 hours a day, to avoid losing money, where low margin of errors in the production are strictly enforced³¹ to maximize profits.

³¹ See: King, Ian, et al. “Chip Shortage 2021: Semiconductors Are Hard to Make and That's Part of the Problem.” *Bloomberg.com*, Bloomberg, 6 May 2021,

The way the exhibit suggests development through looking at how early microchips were hand drawn, to new chips that grow increasingly more complicated and tinier in size, suggest that miniaturization is representative of development and progress. The exhibit traces how microchips have been engineered to become smaller and smaller and celebrates the mass production processes that go along with it. McCarty states:

Currently, even in small companies tens of thousands of identical chips can be fabricated in a day for only pennies apiece. Because the amount of material and the manufacturing procedure remain virtually the same regardless of the number of elements, the cost of the chip does not increase significantly with the number of transistors. And chips are continuing to perform more complex electronic functions at ever greater speeds and lower costs. In fact, the prices have fallen so much that many electronic products once considered luxury items are now less expensive than some of life's necessities. (5)

Here, mass production with simple instructions and assembly-line work made possible by technology are behind the efficiency of production of the microchip that makes possible its speed and size. The number of materials and processes that are standardized is what Swasti Mitter states is part of the process of decentralization, aimed at reducing and controlling the workforce of the factory. Mitter states how a boost to decentralization has been the miniaturization of machines and tools used to easily ship manufacturing labor to export processing zones and

<https://www.bloomberg.com/graphics/2021-chip-production-why-hard-to-make-semiconductors/>

and Anthes, Gary. "Making Microchips." *Computerworld.com*, Computerworld, 8 July 2002,

<https://www.computerworld.com/article/2576786/making-microchips.html>.

increase the amount of labor done at home. For example, Mitter discusses the cottage industry in Silicon Valley that makes use of the most vulnerable immigrant workers, subcontracting the work from electronic companies and working in garage sweatshops or in the home. These practices that go along with miniaturization and standardization are what Mitter states have led to the “creation of Third World enclaves in the middle of the First” (116).

These processes of miniaturization are also responsible for the gendering of women’s bodies in relation to their suitability for this kind of manual labor. Small, foreign, and female becomes a category created to justify the exploitative labor practices that go into the grueling work of hand manufacturing tiny microchips for hours at a time, to offset the billion-dollar production costs of fabs. The MoMA exhibit then participates in this gendering process by narrating the microchip and the manufacturing work that goes behind it as flexible, standardized, small, and cheap. The future created by this particular vision of technology, highlights what is unseeable to the naked eye in the complexity of the microchip and makes invisible the material economy around it. The implications of this are only further suggested as the “peak” of development for the microchip is outlined in the collection as neural net technology in chips that mimic human vision for robots and AI. The exhibit suggests that what is exciting about technology’s future is its capacity for surveillance and the improved images produced from microchips for “medical diagnosis, aerial reconnaissance, and automated inspection systems used in manufacturing,” (McCarty 40) further pointing to a future that continues to value militarism, surveillance, and the mechanization of labor.

Throughout the curatorial statement the labor that is centered is that of the teams of engineers who work on the designs. It is this engineering class that is made visible through the “sheer intricacy of the configurations” that suggest the “thousands of hours, the effort and the

precision, required by teams of engineers to produce a single design” (McCarty 4). As mentioned above, the interpellation of these engineers into craftsmen is achieved by highlighting the hours spent designing. The exhibit explores how the logical rules that guide the design of circuits still leaves room for color and placement as an individual preference, stating that no two solutions are the same. The ability for engineers to not just be creating hardware but to be putting together art through their conscious or subconscious choices, aligns the engineer located in Silicon Valley whose job it is to continue forth Western civilization’s cultural development. The catalogue even states that “engineers often discuss the design of integrated circuits in terms of real estate. Their concerns are those of a developer: crowding, density, economy, and efficiency” (McCarty 6) where “silicon is like a vacant lot,” (McCarty 6) suggests that it is not just the job of the engineer but rather their right to move beyond and expand into the empty space that is their canvas. As mentioned previously in my discussion of Iyko Day’s *Alien Capital*, romantic anticapitalism imagines a freedom of the self that is brought on by the idea of an organic connection to the land. This makes capitalist modernity the manifest destiny of the engineer who sees their project as one that is continuing the tradition of Western humanity. This is furthered throughout the accompanying texts for the early images of microchips where there is an emphasis on the early integrated circuits that were made manually, cut, and drawn by hand. The exhibit is just as much about turning the engineer into an artist as it is about highlighting the development of the microchip.

Returning to the question of small, foreign, and female that gets produce as an invisible presence in relation to the aesthetic of the microchip, where can we begin to locate the body? What would it mean to engage with hands, rather than being a site of contamination, as a possibility to engage with them for the capacity they have to reach for something else, to return

hands to Asian women and draw attention to what is around them, the way they hold lives outside of how they are configured in relation to labor time?

The New “Cultural Software” for Transformative Agency

Asian women’s bodies and their migrations get racialized as contamination, as mechanization, and as alien in relation to temporality and abstract labor. However, reading texts like Janice Lobo Sapigao’s *Microchips for Millions* provides an opportunity to think about the possibility of seeing outside of the terms of contamination through Sapigao’s recounting of her mother’s story of immigration from the Philippines to Silicon Valley. *Microchips for Millions* allows us to critique the construct that bodies become cheap or signs of contamination in relation to the oversupply of a commodity by pointing to how an excess of productivity and time spent laboring in production, happens at the expense of other life and time outside of the factory.

Sapigao’s poetry tells the story of how her mother’s life, the racializing and gendering of her body, was changed through immigration from the Philippines related to an accelerated process of post-1965 immigration that was part of a rapid urbanization and feminization of labor. Robyn Magalit Rodriguez writes of the ways in which the Philippines became an export-processing zone, where feminized, domestic labor was exported the same as other commodities.³² Catherine Ceniza Choy discusses how American imperial projects in the Philippines early on were intertwined with industries like nursing. She points to the commodification of women from nation’s rupture by imperialism and international nurse

³² See: Rodriguez, Robyn Magalit. *Migrants for Export: How the Philippine State Brokers Labor to the World*. University of Minnesota Press, 2010.

migration as signs of inequalities in health services, or what she calls “empires of care.”³³ My reading of *Microchips for Millions* highlights the importance of Asian American literature in drawing attention to post-1965 migration to the United States and the global, to think about what emergent ways of being and knowledges are formed as one’s body is racialized and gendered in relation to globalization. Neferti Tadiar argues that this kind of emergent culture in sites of “waste,” is a sort reclaiming of agency and expressive potential that cultural production has the capacity to re-represent historical experience. Tadiar posits forth that because the outsides of capitalism are to be found prior to their accumulation or appropriation, what is outside of capital is rather a temporal dimension that can be understood for what appears to be waste.³⁴ Interestingly, much like microchips, Tadiar writes of these literary social movements, that don’t just represent minoritized subjects but rather creates new subjects with transformative agency, as “‘culture software’ for the transformation of dominant social relations...they are, in this regard, technological interventions in the process of subjective production of existing social relations” (16). Re-reading emergent cultural production, where Asian women’s bodies transnationally are seen as waste or contamination, is itself a technological intervention in the abstract processes of technological advancement and innovation.

Building on Tadiar’s notion of literary possibility as cultural software and in thinking about the distinction between hardware and software, how can the way we abstractly think about

³³ See: Choy, Catherine C. *Empire of Care: Nursing and Migration in Filipino American History*. Durham: Duke University Press, 2003.

³⁴ See: Tadiar, Neferti Xina M. *Things Fall Away: Philippine Historical Experience and the Makings of Globalization*. Duke University Press, 2009.

technology provide new ways of understanding our relation to technological progress? Texts like Sapigao's, begin to reconceive of the relationship between the liberal, masculine identity of the engineer who produces software and conceptually designs hardware and feminized laborers that produce the goods themselves. Blurring the distinctions between categories of labor and who gets to claim which subject position, doesn't reclaim the subject of craftsmen for women like Sapigao's mother, but rather posits forth a more relationally constructed notion of technology, one that relies on the phenomenological life experiences of women of color as they move through the integrated circuit. However, through stories like Sapigao's mother's, what we choose to see and how we choose to think about relationality, impacts the types of cultural software we choose to value and center in the way we speculate on what is to come and the creation of new technologies we hope to create.

Specifically Asian women's bodies configured as labor that exceed what is socially necessary and then deemed cheap or a contaminant, can be re-read by thinking about how capitalist modernity takes away time from other spaces and devalues other forms of time spent in immigrant women's lives. Tadiar writes that for feminine subjects:

Within this capitalist logic, the female body is inseparable from time. Unlike the masculine subject of labor whose labor-time is stolen, the feminine being doesn't have time, that is, time that is separate from her being—she is time. The equation of her active being as natural, reproductive activity—indeed, as nature—means there is no time she can call her own. Time doesn't circumscribe her labor. Her laboring activity is not measured by time. She is both working and being all the time. Undifferentiated, measureless time becomes the condition of feminine being under a modern capitalist order. (60-61)

Women's bodies are undifferentiated from labor time in the production of a commodity because Tadiar suggests women's bodies are completely subsumed by time. Time spent tending to work and to reproduction, means there is never a way outside. Tadiar points to emerging cultural formations in what is considered "wasted" time of leisure to read outside of capital. In my readings of *Microchips for Millions* and my retrieval of hands, I also think of this time not accounted for by capital and read it in relation to the ways in which labor in the factory continues to affect the "wasted" time spent with loved ones and in domestic spaces and the life of Sapigao's mother. Rather than the abstraction of labor as contamination or as feminized and low-skilled, texts like *Microchips of Millions* insists on understanding how immigration and individual lives are impacted by time stolen, not as excess and mechanization, but at the expense of how the body becomes gendered and racialized to point to who and what is being contaminated and what new knowledges of the body are formed as the circuits of capital change the body.

A critique of how the Asian body gets introduced as a hypervisible source of contamination and then abstracted to be made invisible, reveals the paradox of the need for cheap labor and the United States' historical need to control the terms of citizenship. Critical attention to contamination reveals representations of an Asian subject whose labor is devalued and made alien to be placed outside of the terms of normalcy. Asian American literature provides the opportunity to reverse the language around what and who is being contaminated or how small, foreign, and female is constructed by speculatively intervening in the temporality of the political economy, by thinking about how women's bodies are subsumed by time.

The Racialized Formation of Contamination

In the introduction to Janice Lobo Sapigao's *Microchips for Millions*, M. NourbeSe Philip discusses the collection of poems in terms of all language being code. She writes that Sapigao's poetry plays with language as code, negotiating the "foundational binary code of the microchip, the code of her mother tongue Ilokano, the coded language of the factory rules that are designed to protect the chip but which are presented as protecting the workers" where "the poetry works to reveal the complicated knotted entanglements of the global economy, showing us how indeed the personal is the political, is the global, is the industrial, is, indeed, the poem of (in)possibility" (Philip 7). Philip continues to discuss how Sapigao's poetry uses text, visuals, and binary code having the effect of "seducing, even contaminating, the reader with their hard-edged macabre beauty" (Philip 7). Philip's introduction illustrates two important aspects of Sapigao's work when read in relation to the *Information Art: Diagramming Microchips* exhibit. First, it establishes all language as being a form of code and with this points to the circumstances through which it is formed and circulated. Rather than technological code as being something engineered and swept away in the development narrative of futurity, made elusive by its aestheticization and centering of the engineer craftsman, Sapigao's work suggests that language itself is the foundational code of the microchip, grounding it to the ways in which it gets produced socially. This form of language as personal and political, with its foundations in women of color feminism, opens the possibility for Asian American cultural production to think about potential sites of disruption for what is thought of as belonging to the future. Second, Philip's introduction suggests that there still is beauty to be found around the microchip, as in the MoMA exhibit, but Sapigao's book of poems grounds that beauty in something else. The exhibit at MoMA seeks to find beauty in imagining a certain vision of the future that is the continuation

of progress and development. However, Sapigao's poems explore how beauty is thought about by troubling the conditions of that progress by contaminating the reader and interpellating them into the messy story of development in Silicon Valley, challenging the idea of the future as sterile, fast, and efficient.

I suggested in my reading of *Information Art: Diagramming Microchips* that the Asian immigrant woman's body gets made invisible in the description of the step-by-step process of manufacturing. By turning the body into a source of contamination, measured in its capacity for error, small, foreign, and female gets made hypervisible by turning the body into an object. In Janice Lobo Sapigao's poem "The Clean Room" the process by which contamination is eliminated points to how immigrant women's bodies, more specifically hands in the reference to gloves and eliminating human touch, get constructed as sources of contamination through discipline and surveillance. This stands in contrast to the hands of engineers that produce hand-drawn designs or hands that are central to the creative labor of microchip design.

In "The Clean Room," Sapigao's mother's words are interspersed between the numbered list of items that a semiconductor manufacturing worker must put on before they step into the "clean room." Listed is a hairnet, multiple sets of gloves, mask, and goggles, among other equipment one must put on and discard before coming in and stepping out. Between the list of words, Sapigao quotes her mother discussing the restrictions put in place to discipline her body and control her attire, "you have to wear/a suit. goggles./everything/is covered./everything./'you can't touch anything./you have gloves. they will/get mad at you'" (19) stating that "it's hard to breathe./sometimes. oh my god" (19). Thinking about the way cleanliness and sanitation is used in relation to the object of the chip, makes invisible the immigrant woman's body while making hypervisible her presence for its capacity to leave a

trace. The step-by-step process that Sapigao's mother must go through elucidates how the factory turns her body into a site of contamination. Rather than a natural formation, the dehumanizing process of putting on the protective gear, turns her mother's body into an assemblage, each body part focused in on for the ways in which it should be covered, while her mother explains the feeling each piece of equipment has on her body. In another interjection on the list, somewhere between "7. Boot covers, 8. Goggles, and 9. Gloves" (Sapigao 19) Sapigao's mother addresses her daughter stating, "you can only call me on my break, okay? 8:30 or 12:30" (Sapigao 19). It is in these moments that happen in between the numerical list of procedures for entering the clean room, that we can hear Sapigao's mother. It is these moments of interjection between formalized processes that turn her mother into a site of contamination, that reveals the process as itself a racializing and gendering construct while pointing to conversations and a life outside of the factory,

After describing the list of items to enter the clean room, Sapigao illustrates a grid-like circle with the heading "Sources of Contamination" (20). Listed underneath is the percentage breakdown of contamination such as equipment, room structure, and ventilation with people accounting for the largest portion of 75%. Above the writing Sapigao includes the quote "A clean environment is designed to reduce the contamination of processes and materials. This is accomplished by removing or reducing contamination sources" (20) followed immediately by the statement "my mother is contaminated" (20). The quote speaks of the clean environment in terms of reducing sources of contamination, using the same clinical language of *Information Art: Diagramming Microchips*. By following the procedural language directly with a proclamation, Sapigao relocates the site of real contamination and makes visible her mother's body. Following her declaration, she reflects again on the process of making silicon wafers produced, where

“...machines subject silicon wafers to incredibly intense vacuums, caustic chemical baths, high-energy plasmas, intense ultraviolet light” (Sapigao 20). After identifying her mother as being contaminated, Sapigao’s discussion of the process places her mother’s body in the scene of production. According to the quote, it is the silicon wafers that are subjected to the process of production. However, by making her mother the subject of that which is being contaminated, later explored by Sapigao in her discussion of her mother’s cancer, the reader sees the toxic process of making wafers not in terms of innovation and science, but rather in relation to what is made invisible.

In another poem, “The Source”, Sapigao writes of the operating floor in relation to the contaminants that float in and out of the space. She writes of the dust particles, germs, oil and grease, fibers, eyelashes, and other sites of contamination in relation to their source. While *Information Art: Diagramming Microchips* discusses prohibiting workers from having feminized contaminants such as makeup or jewelry, as well as dust and dandruff, Sapigao describes contamination in relation to the bodies they come from, with descriptions that make aesthetic their presence. For example, Sapigao’s first two stanzas state that “sunlight outlines/dust particles,/angles rainbows/from hair strands/we can count/dirt like stars,/fluttering and floating/in day time” (38). In this description dust is illuminated through light rainbows that are created from hair strands. Dirt is likened to stars that flutter through the sky and can be counted. She later identifies other contaminants such as oil and grease in a space where “fibers fall from faces,/eyelashes and hands” (38). The contaminants in the production room are mused upon, rather than turned into symbols of cheap or contaminated Asian labor, troubling the ways in which romantic anticapitalism situates itself in opposition to modernity, making modern production nonhuman. Furthermore, Sapigao is careful to tie contamination to the bodies from

which they come from, where these abstract contaminants come from faces, eyelashes, and hands that belong to women who carry their whole beings and bodies in and out of the factory.

Throughout *Microchips for Millions*, Sapigao draws attention to the ways in which her mother's body has been disassembled and reassembled, made nonhuman and small, foreign, and female to be feminized. In illustrating her mother's life caught within the flows of microchip production, Sapigao demonstrates how her mother's embodiment is bound up in the flows of the political economy.

In the poem, "The Praise", Sapigao reflects on the way her mother's body gets reconfigured within technology's global labor force. Between binary code, Sapigao writes "my mother builds/the backbone of the silicon valley/you can say she's/single-handedly responsible/for the microchip revolution/my mother is a step ladder/is a spine/is a skeleton is a muscle/is a labor force is vertebrae is a staircase/is the key to a multi-millionaire's business/is a person" (36). Here the assemblage of her mother's body, is changed by her labor in the microchip revolution. The breaks and repetition of the elements of her body such as spine and vertebrae, contrasted directly with inanimate objects that are used in metaphors for progress in reaching success such as a stair or key, reflect the ways in which the body as small, foreign, and female speaks to an economic process of racialization, that requires making some bodies nonhuman in the process of capital accumulation. In this description that breaks apart the body and describes the separation of body parts in relation to objects, race and gender are revealed to be lived experiences and bodily renderings that contain memory and knowledges of what happens to the body as it experiences immigration and exploitation in its transnational movements.

Sapigao thinks about this nonhuman form and the knowledges that come from it later when she states and reclaims the artisan identity for her mother, writing “my mother is a lithographer” (41). However rather than simply reclaiming the identity category posited forth by the MoMA exhibit, Sapigao continues later in the page stating, “my mother is an object” (41). In contrast to the craftsman posited forth in MoMA’s exhibit, these identities placed together aren’t invoked to imagine a relationship of domination over the control of a high-tech future. Rather than rely on the tropes within romantic capitalism of proximity to the land and unalienated production or claiming a liberal humanist subject position for her mother as the sole engineer, Sapigao holds both identities at once between the space of human and not-quite human to point to the types of knowledge that can be formed and explored from a non-dominating narration of technological development.

Alternate Temporalities of Disavowed and “Wasted” Time

While *Microchips for Millions* points to the nonhuman form and the ways in which small, foreign, and female is a racializing assemblage, Sapigao insists on placing her mother’s life within the context of a historically disavowed past and the “wasted” time of leisure to account for time that has not been subsumed by capital. In the poem “The Person”, interspersed between the contexts of her mother’s life, Sapigao writes of other aspects of her mother such as her favorite colors, the meaning of her name, her first car. In one stanza Sapigao writes, “she likes shopping/in the clearance sections/of ross and marshall’s stores./she likes filipino game shows/and crushes on/former bay area/weatherman john farley” (44). These examples point to the time that isn’t accounted for in seeing her mother’s body as a site of contamination and hyper-efficiency. If, as aforementioned in Tadiar’s reading of the feminized body as always

aligned with time under capitalism, Sapigao's mother's life is consumed with work in and out of the home. It is these moments that are otherwise, where Sapigao's mother's hands are resting or doing other forms of reproductive labor, that Sapigao reveals the time for other activities that resist seeing time in relation to inhuman efficiency in readings of small, foreign, and female.

Building from these explorations of free time, "The Person" situates Sapigao's mother within the context of the global flows of capital and migration from the Philippines, drawing attention to the conditions of her mother's post-1965 immigration. She talks about this past in relation to little details of her mother's life—the activities she enjoys partaking in, the goods she consumes, and the family around her. Sapigao's poems argue for the possibility of seeing outside of the terms of exploitable, feminized laboring time. This seeing outside draws attention to the conditions of war and displacement, centering Asian American cultural production as an alternate site that points to what Lisa Lowe calls "the economic contradictions of capital and labor on the national level, and the contradictions of the political nation within the global economy" (Lowe, *Immigrant Acts* 10). Poems offer an alternative site that is constantly grappling with the present moment's relation to a "past" that is always interrupted and broken by militarized violence, thinking through the global conditions of the economy in relation to the local and the global. The high-tech economy's need to define itself in terms of innovation and future aesthetics, as can be seen in the MoMA exhibit, is always threatened by cultural production that makes U.S. imperialism reappear outside of the terms of its disavowal.

In "The Person," Sapigao writes about her mother's life stating that:

she was born in 1952/in alo-o, umingan,/pangasinan, philippines./when i asked
her,/ 'what schools did you attend?'/she said, 'are you/interviewing me again?'/i
have to go to the bathroom.'/01101011011001010000110100001010/i can't catch

her/but i always have her./01101011011001010000110100001010/Ma has two
sisters and/two brothers in the bay area,/and two sisters who passed away/during
world war two. (44)

Her mother's story can only be understood in terms of omissions and interruptions. The series of switches in binary code that work in the transistors of a microchip to switch between the two states of "0" and "1" to complete calculations and tasks, have the effect in Sapigao's poem of breaking up and switching between sections. Her mother's life resists ways of thinking about her story just in terms of logic and always points to something else that isn't completely knowable. Asian American studies as a trace of disavowed history is present in Sapigao's description of her mother's life as resisting a neat, completed meaning. The reader learns that her mother's schooling when read in relation to other poems was interrupted. This interruption is unable to be accounted for because for the reader to understand this, they would have to be able to think about the obfuscations of the nation-state and the United States' presence in the Philippines. Sapigao points to the historical contexts that formed her mother's life—being born in 1952 at the start of the Cold War in Korea, family that also immigrated from the Philippines to the Bay Area, and siblings that passed away during World War II. To see the full person, these contexts contribute to and inform the ways in which Sapigao's mother's life is made available as small, foreign, and female for microchip manufacturing.

The next switch comes later when Sapigao writes of her mother, stating that:

she came to the united states in 1978./she came with her sister/they stayed with
her parents/and brother; all of them/were new immigrants/sharing a small
house/in san francisco, california./01101011011001010000110100001010/Ma's
first job/was for twin industries,/another electronics manufacturer. (44-45)

Sapigao's mother's immigration post-1965 doesn't get narrated in terms of opportunity and development that has the capacity to then be co-opted as the language of benevolent assimilation. Rather than tying her mother's immigration to an America that presents itself as the land of opportunity through an immigrant narrative of working hard to be seen as a successful citizen, Sapigao quickly switches to binary code to interrupt the initial arrival. After this switch her mother starts working for an electronics manufacturer, revealing the ways in which her mother's first job was the outcome of a set of racializing and gendering processes that her mother experienced after immigration. The conditions for her mother's life are never separate from the various immigration policies, militarism, and technological industries that form and are intertwined with the Cold War. Sapigao's mother's life that insists on these moments of migration and war, point to the ways in which technological industries develop alongside places and people that are changed and exploited by the way militarism violently accumulates. Reading this account in relation to histories of technological development, reveals the importance of reading personal histories of historical time disavowed and not accounted for by technology's narrative of "progress" to make visible technology's militarized foundations not only on the West Coast, but in the flow of labor for manufacturing as well. As aforementioned in the introduction, the shifting means of production within the United States and globally relies on a "flexible" labor force of women of color not only in manufacturing operatives abroad but in the same factory conditions within the United States. Migration to the United State and the exporting of production depends on the transnational movements of small, foreign, and female across local and global sites.

Conclusion

Returning to the idea of immigrant women's hands, what if we read hands outside of the terms in which they have been mechanized and racialized for exploitation? What if we read hands as having the potential to draw attention to something else? To think about hands in terms of their potential to build new futures and their ability to form alliances, to center hands not in their capacity for extractive labor and contamination but for the ways in which they have been able to resist and still create something else.

By attending to *Microchips for Millions* and putting Asian American cultural production directly in conversation with the aesthetic futures speculated on in *Information Art: Diagramming Microchips*, new possibilities emerge for making visible the global labor of women of color outside of the terms of neoliberalism. Centering hands and the question of contamination by subverting the terms of representation reveals the ways in which Silicon Valley and the high-tech political economy is continuously haunted by the material legacies of militarism and immigration post-1965. My discussion of contamination and the tracing of how it appears in relation to labor, seeks to make visible the constructedness of small, foreign, and female. Breaking apart this formation and reading for alternate narratives outside of how the body gets configured in relation to temporality, not only returns hands to the people they belong, but in that return insists on seeing the development and progress of technology through the spaces and moments where small, foreign, and female has existed and been changed by.

CHAPTER TWO

The Gendered Labor of Empire: Reimagining the Terms of Racialized Embodiment in Aliette de Bodard's "The Waiting Stars" and "Immersion"

In Japanese Breakfast's music video for "Machinist," Michelle Zauner performs the title-track from her album on board a spaceship where she hallucinates on ship fuel and disassembles pieces of the ship in attempt to build a tangible body for the robot she has fallen in love with. The song is a sci-fi ballad about a romance between a woman and a robot, the lyrics telling the story of an unemotional and inaccessible lover parallel them having no human body. Zauner imagines a speculative adventure from the lines "you were tuning out / a muted channel, a cold ship, a hologram, an abyss" (Zauner) where the only way to conceive of this failed intimacy is by representing it in outer space. As she struggles to build a robot body for her lover, to make their consciousness into something tangible and closer to human form, Zauner forages in a space suit against a backdrop of loose wires and metal grating as the system of the machine beckons her to "Build Me" through text on the computer interface of the ship. However, ultimately the project fails as Zauner is unable to give a robot form to the interface as she asks throughout the video in the bridge to the song "do you trust me? / Can you feel it?" (Zauner) to which the synth robotic voice responds, "total control / can't let go" (Zauner) and she is left suspended in the air from the wires of the ship.

This failed project at turning a computer's consciousness into an embodied robot, speaks to technology's fascination with the posthuman, a speculative possibility for the future where minds can be downloadable into postracial bodies and human form ceases to matter. In this future, technology is narrated as being headed toward a future where race and gender will be

choices, failing to account for the ways in which race and gender themselves have been technologies employed to create genres of the human. Technology and science fiction's fascination with creating futuristic cities and people in a *Blade Runner* style orientalism, relies on an aestheticization of Asianness with futurity to obfuscate the materiality of technology's production, predicated on the labor of an increasingly globalized, gendered, and racialized workforce. Posthuman bodies that can float in and out of human forms, don't make race and gender obsolete, but rather often depend on dehumanizing Asian women's bodies as expendable in order to drive a narrative of neoliberal post-racial multiculturalism.

Lisa Nakamura has pointed out in *Cybertypes* the ways in which non-Asian gamers use Asian avatars in digital gaming spaces, "like tourists who become convinced that their travels have shown them real 'native' life, these identity tourists often tool their virtual experiences as other-gendered and other-raced avatars as a kind of lived truth" (14). In Nakamura's discussion of gaming, avatars are used to appropriate the identity of another in order to become a digital tourist, showing another way in which these bodies are often seen as being expendable, taking their experience as a lived truth rather than a pathway to understand racialization. LeiLani Nishime in her analysis of science fiction films like *Ex-Machina* and *Cloud Atlas*, that represent Asian women's bodies as robots to imagine possibilities for racial transformation that defaults to whiteness as the ideal post-racial form, relies on the discarding of these racialized bodies as prosthetic. In these examples, Asian characters are themselves robots that provide labor where these depictions locate the "source of labor exploitation in the racialized bodies themselves rather than globalized economic systems. Instead of seeing a system of migration and labor that marks particular bodies as raced and, therefore, subject to exploitation, we view certain bodies as inherently less valuable and, therefore, exploitable" (Nishime 40). Representations of the

posthuman that rely on seeing Asian bodies as cyborgs or bodies that can easily be used for the default of whiteness, stem from cultural imaginings of these bodies as being more naturally suited for the low-wage labor of high-tech manufacturing. Representation and materiality converge where cultural depictions of Asian women's bodies as being themselves technology, further dematerializes and make invisible the political economy that forms small, foreign, and female.

This chapter critiques technology's narration of posthuman form by centering the ways in which race also is a technology that has made tools out of people. I read two short stories by Aliette de Bodard, "The Waiting Stars" and "Immersion," to think about who benefits from seeing the future as post-racial, specifically by employing technologies of race to push forth a progress narrative of technological advancement and disembodiment. The two short stories I examine in this chapter imagine a path between embodiment and disembodiment, drawing attention to how power is always intertwined within cultural definitions of the human. The act of making some bodies human and others nonhuman is produced through a series of socially constructed truths around what being human has come to mean across history. The racializing structure of Aliette de Bodard's Xuya universe is tied throughout de Bodard's short stories and other fiction to the memory of war. Aliette de Bodard states that the inspiration for the Xuya series is Vietnamese culture, referred to as "Dai Viet"—the premise being that China discovered Americas before any European nation. It is through de Bodard's speculative centering of the figure of the refugee, that the technological advancements she imagines of the future are tied to structures of liberalism that continue to depend on race as a technology. This operates to imagine self-possession as the matter of the individual rather than being predicated on a political economy dependent on militarism. Racialization and Asianness under technologies of

posthumanism in “The Waiting Stars” function to extract from the figure of the refugee under a failed promise for inclusion and assimilation. Similarly, “Immersion” sees assimilation as a process that one can never fully arrive at in a world that sees Asianness as a purely touristic and aesthetic trace dematerializing visual forms from the material political economy. I read both stories and speculative imaginings of the past, present, and future to further understand the category of small, foreign, and female as it is seen as a colonial project that shifts depending on the militaristic goals that have a hand in enforcing racial desire. Speculation in relation to the image of an Asian, feminized, robotic, posthuman, opens up the science fiction trope to engage with the experience of being made nonhuman. Aliette de Bodard’s stories play with science fiction’s forms and its use of the visibility of Asian women as representatives of a posthuman future to speculatively subvert forms that aren’t normally given agency. By following the inner thoughts of Dai Viet women, alternating perspectives from intergenerational characters, but always in the voice of the “other,” de Bodard speculatively opens the phenomenology of the small, foreign, and female as posthuman.

In my chapter, I first read the racializing structures of Empire that create definitions of the human to understand how these categories are enforced through various forms of transnational, gendered forms of intimate labor specifically. As Eileen Boris and Rhacel Salazar Parreñas put forth, intimate labor works on the assumption that certain forms of work are related to care or intimacy to be understood as “the unpaid responsibility of women, and, consequently, is usually considered to be a non-market activity or an activity of low economic value that should be done by lower classes or racial outsiders (2). I think about these forms of intimate labor that are performed by the narrators in Aliette de Bodard’s short fiction to argue that technologies of race and gender exist alongside and to reproduce an idea of technological advancement and

innovation as posthuman—attempting to turn racial embodiment into strictly a form of representation, rather than a historical outcome of racial capitalism and militarism. The promise of posthuman form in the Galactic empire, works to produce a Cartesian separation between the body and mind to dematerialize racial capitalism, while subsequently relying on racial otherness to continue the racial technology of empire.

Second, I offer a way of making visible the category of small, foreign, and female to self-reflexively think about the terms of its own making in relation to how technologies of Asiatic racial and gender form can give way to new forms of possibility and resistance that emerge outside of liberal humanism. I center my readings of both short fictions to think about how selves outside of liberal humanism are constituted, not as downloadable forms, but through memories of kinship with other intergenerational relationships between women. Rather than aligning race with decontextualized Asian cultural forms, I argue that de Bodard's texts offer a relational understanding of gendering and racializing structures that points to other knowledges of experiencing embodiment across generations and global spaces that offers a more complex understanding and deeper engagement with how technology's economy has been formed and constituted through the home and heteronormative family. I suggest that these alternative kinship formations resist the structure of individual liberalism through their alternate orientations to family.

Kinship and the Genres of the Human/Non-Human

Aliette de Bodard's "The Waiting Stars" and "Immersion" take place somewhere in the 22nd Century in a corner of space where, after the development of Minds "large AIs capable of piloting ships into deep space" (de Bodard, "The Universe of Xuya"), a "Galactic (Western)

culture rubs against a diminished imperial Chinese/Vietnamese culture" (de Bodard, "The Universe of Xuya") in a series of colonized space station stories. Xuya was originally used to refer to the whole continent of North America, but after various independence wars in the mid-19th century, Xuya refers only to the new country of Chinese Ancestry which is all land west of the Rocky Mountains. The events that parallel the Vietnam War happen in the early 19th century where the South of Dai Viet is occupied by France and the North by China. A proxy war takes place and in 1820, there is a rise of a Dai Viet imperial dynasty where the Dai Viet remove both the French and the Chinese. Moving forth into the 20th century, the Dai Viet go through a time of economic and political instability, leading to the migration of many Dai Viet to Xuya. Stations in outer space such as Longevity, the setting of "Immersion," still exist as independent for the Dai Viet. However, these space stations due to their location in the trade network, face a gradual destruction of their culture from the Galactics. Aliette de Bodard's short stories in the 22nd century grapple with what a future project of colonization into deep space might look like. In these speculative imaginings, de Bodard explores how the body gets incorporated into a racial hierarchy and marked by difference, to assimilate to what is the nation.

Despite possibilities in this speculative universe for the mind to be reprogrammable into any body, Galactics repeatedly mark bodies as small, foreign, and female though racialized and gendered, visual markers of difference. Assimilation of the Dai Viet refugees coming to Prime, the center of the Galactic Empire, happens in both "The Waiting Stars" and "Immersion" either through the erasure of memory and/or the incorporation of these posthuman downloadable forms of consciousness into bodies that aren't one's own. De Bodard's stories comment on the limitations of seeing a futuristic physical body, where consciousness can easily be downloadable and programmed into differing racialized and gendered physical forms, narrated strictly in terms

of the possibility of a post-racial self. In N. Katherine Hayles, *How We Became Posthuman*, Hayles centers the possibilities for what it means to be posthuman, stating that it creates the “exhilarating prospect of getting out of some of the old boxes and opening up new ways of thinking about what human means” (Hayles 285) leading to new configurations of the self. A reading of Hayles suggests that the posthuman might be free of some of the categories that put in place racial essentialism, but the claim of getting out of all old boxes seems too liberatory in some instances, not accounting for how raceless and genderlessness still defaults to whiteness. The problem emerges in posthumanism discourse between the potential for posthumanism to be liberatory and for it to reinscribe certain racializing hierarchies. In *The Souls of Cyberfolk* Thomas Foster brings up this tension in posthumanism, seeking to understand this opposition by working through the critical potential. Foster points out the hierarchical thinking in relation to the body that in redefining humanity in relation to technology “is privileged over struggles to redefine the meaning and value of social differences between human beings” (27). Foster sees this as having the potential to replace traditional racializing hierarchies with new technological forms.

These tools of racialization are further examined by Alexander Weheliye in *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human* who critiques the ways in which the figure of the posthuman ignores the parameters of race—assuming that a “future” has arrived that a western version of humanity is accessible to all.³⁵ As

³⁵ Weheliye states “posthumanism and animal studies isomorphically yoke humanity to the limited possessive individualism of Man, because these discourses also presume that we have

Weheliye's work asks, what is the value of the posthuman for those that have never been deemed fully human? How have the bodies of immigrant women always been posited as posthuman in order to be exploitable? Posthumanist approaches that do not address the embodying effects of racial capitalism cannot account for the ways in which bodies—in the case of de Bodard's stories, the Asian, female body—have been made nonhuman through technology. Racialized labor is attached to the immigrant body through a relationship to technology that mechanizes certain bodies as nonhuman. For some subjects being equated with technology in the vein of the posthuman isn't the identity of a futuristic self, but rather part of an ongoing process of extracting labor and dehumanizing certain bodies to make tools out of people. The "post" of posthuman doesn't capture an unfinished history in which racialized labor has constituted the body in nonhuman and machine-like ways.

The category of human is a container into which the modern order, defined strictly in economic terms, defines certain bodies in terms of a binary between capitalists that make money from the machine and the nonhuman which can only be made more human through development. Sylvia Wynter explores how the categories of "rational" man and "irrational" nonhuman, shift throughout historical moments, where the genre of being human gets defined and organized according to what is needed to "function for the nation-state as well as the imperial orders of the Western bourgeoisie" (322). This creation of the other out of "the Negro, the Native, the Colonial Questions, and postcolonialist the 'Underdeveloped' or Third/Fourth-Worlds Question can be clearly seen to be the issue, not of our present mode of economic production, but rather of

now entered a stage in human development where all subjects have been granted equal access to western humanity" (10).

the ongoing production and reproduction of this answer” (Wynter 317). These categories are continuously being reproduced and imagined in relation to the biological order of things. If the Western genre of human moves throughout linear time to be defined in terms of capital accumulation always in relation to the nonexistent void of the “other” then what does it mean to see the body outside of the categories of human? A utopian vision of bodies ceasing to matter—through the liberatory potential of technology to grant bodilessness, when technology itself, culturally and materially, is produced from capitalist accumulation that relies on dehumanizing racialized and gendered bodies—isn’t possible in de Bodard’s world where characters are literally hidden under layers of avatars, wires, and alternate bodies.

In terms of the racial and gendered embodiment of Asian women, the category of small, foreign, and female, is produced as nonhuman in the way it gets understood as a mechanized body, easily exploitable and naturally suited for the needs of capital. In this sense, Wynter’s “irrational nonhuman” here is directly being produced to be othered, making capital accumulation more human. The process of defining the levels of human through deciding who should be granted freedom and the right to life, is supported by the ways in which imperialism has historically made tools out of people. In the context of Aliette de Bodard’s Xuya universe of short stories, the lives of women across generations have been situated, enfolded within, and resisted the ways in which militarism has structured the political economy, drawing attention to how women’s bodies and intimate spaces have been militarized. Naturalizing certain expectations around femininity and masculinity directly normalizes a masculinized, heterosexual militarism, through control. Redefining what gets naturalized as small, foreign, and female requires reflecting on how those categories are unnaturally produced through militarized ideas about Asian women’s bodies as feminized workers, submissive brides, and sex workers. In the

case of de Bodard's Xuya stories, the mind being redownloaded into another body that is racialized as "other" or a state of consciousness that conforms as it is covered in layers of a body that doesn't belong to the self, is a violence that takes place to fit into these existing categories.

Engaging with the way the memory of war within the Xuya universe impacts the lives of women, requires focusing on how this development narrative coalesces with the production and expectations of Asian women's sexuality and femininity produced from war. The hypersexual depiction of Asian women on film is outlined by Celine Shimizu as she thinks about the history of hypersexual and oriental images of Asian women. She asks, "what is the role of fantasy and the psychic life of images in formulating our understanding of their power? How do images of the suffering, suicidal Asian woman complement colonial projects in the encounter between Europe, the United States, and Asia across the twentieth century?" (Shimizu 2-3). This set of questions asks which expectations of femininity police the boundaries of the political, local, and international. The cultural narrative of the sexualized Asian women provides an avenue to critically engage with what the production of these racial and gendered imaginaries normalizes about power. Noenoe Silva takes this lens in reading the work of hula in relationship to American militarism in Hawai'i. Hawai'i, unlike other sites where representations of Asian women's sexuality gets produced through the interests of American militarism, has a history of uniquely indigenous notions of hospitality that have been used as entertainment to broker the colonial relationship between the United States and Hawai'i. However, Silva thinks about the ways in which indigenous and Asian women's performances of hula are cultural projects that interject in the ways that colonialism is seen as a uniquely political and economic project. For Silva, hula began the process of making Hawai'i into "an eroticized and feminized space, a space disposed to political, military, and tourist penetration" (6-7). This reading of how spaces or

practices become eroticized and feminized, to secure the interests of American militarism, is important to how the figure of the human/nonhuman become interrogatable. By thinking about the registers through which race and gender categories are used as a tool to define the various intersecting parameters of small, foreign, and female, the genre of posthuman and any possibility of imagining a mind outside of the physical body no longer becomes a utopian and dehistoricized project, but one that points to the possibilities for the body as it moves in and out of the registers that have marked it as other.

In de Bodard's short stories, Asian women's bodies are othered and visually needed by the Galactic empire to stabilize hierarchies of humanness in relation to technology. The Dai Viet in de Bodard's story are allowed entrance into the nation on the condition that they are othered—their physical body gets coded as a militarized refugee, wife, laborer, or adoptee. Paradoxically the only way in which assimilation and enfoldment into the dominant is possible is through an immediate othering of the physical body—either seen as “foreign” or too fake to possibly be a true Galactic. However, othering also provides a new framework of seeing because to be outside of what is “Galactic” means being forced to understand the racializing structure in a way that isn't understandable by those who have produced it. This management of taxonomical difference allowed for the emergence of white, liberal personhood to be defined in terms of sexuality, alongside racial difference, where Asian women seen as unassimilable, helpless, or hypersexual are reproduced through empire's gaze. These movements across the diaspora and the ways in which Asian women have been “doubly constructed by American popular culture as sexually exotic, threatening, and licentious, as well as properly domesticated feminine and delicate” (Shimizu 47) reveals the forms of representation that lay claims to knowing Asian women within racial hierarchies of vision.

However, what it means to be embodied as an Asian woman, despite transnational registers of understanding placed upon your body, is also a site of possibility—to work against these images and representation itself. Being able to politicize representations of the body and critique subjecthood, turns small, foreign, and female into an analytic that self-reflexively thinks about its own making. For the women in de Bodard’s short fiction, the terms of embodiment are resisted by thinking about what possibilities exist for the physical body as it looks to other ways of narrating physical form to think about embodiment across generations. Retrieving formations of relationships between Asian women outside of the heteronormative family structure reproduced through Empire, requires looking outside of the ways in which intergenerational relationships in diasporic Asian families are often fractured and formed by economic aspirations, which require new forms of survival. erin Khuê Ninh writes of the kinds of filial obligations formed through these contexts, where Asian American familial relations are often ordered by a “capitalist logic and ethos, their violence arranged around the production of the disciplined and profitable docile body,” structuring relationships within the family in terms of filial obligation. In Lisa Lowe’s notable piece on heterogeneity, hybridity, and multiplicity, these narratives of generational divides and filial obligation make private the “particularities and incommensurabilities of class, gender, and national diversities among Asians,” making generational transmissions of identities an issue of east versus west, rather than one that considers the nonlinear practices about larger material contexts, one that is partially imagined.

To retrieve other forms of kinship formations, love, and care fractured through the violence of assimilation and the racialized and gendered effects of migration, I close read for attention to how bodies are specifically oriented toward one another in emergent ways. I borrow from Sarah Ahmed’s work on orientations that shape how bodies exist with each other in new

queer formations of domestic spaces to make central female subjectivity in conceptualizing a project that seeks to not reproduce patriarchal structures of kinship, as well as capitalist accumulation. Orientations in Ahmed's sense are not strictly about how we inhabit space, but "how we apprehend this world of shared inhabitation, as well as 'who' or 'what' we direct our energy and attention toward." A queer phenomenology, in this sense, allows us to revisit what care in the home looks like by retrieving intimate labor to see how love can exist in outside of heteronormative formations. By thinking about the positionality of women across the intergalactic diaspora in de Bodard's short stories, and the ways in which small, foreign, and female is disciplined through the space of the gendered and racializing logic of the domestic, I make female subjectivity central in what Gayatri Gopinath states of a queer diasporic project that "begins instead to conceptualize diaspora in ways that do not invariably replicate heteronormative and patriarchal structures of kinship and community" (6). The management of taxonomical difference produced through small, foreign, and female in the home allows for the emergence of white, liberal personhood to be defined in terms of sexuality, alongside racial difference. Rather than seeing Asian women seen as unassimilable, helpless, or hypersexual as reproduced through empire's gaze, what other formations and orientations are possible through revisiting intergenerational relationships between women?

Racialized Reprogramming

Temporally, Aliette de Bodard situates the "The Waiting Stars" and "Immersion" in the 22nd century. She refers to them as her "colonised space stations" stories, which take place in a "corner of space where a Galactic (Western) culture rubs against a diminished imperial Chinese/Vietnamese culture" (de Bodard, "The Universe of Xuya"). In "The Waiting Stars" de

Bodard imagines spaceships are part of familial generations where Dai Viet women birth the Minds that operate family ships. Despite the revised speculative orientation to historical time, the Galactics, a Western colonizing power, dominate pockets of the universe, colonizing space stations under a narrative of development. The sentient spaceships as part of family lineages, birthed by Dai Viet women, are viewed as a horror to the Galactics, who see this differential relationship across generations to a machine as underdeveloped. “The Waiting Stars” alternates between two stories—the perspective of two cousins Lan Nhen and Cuc, traveling through the universe on their family mindship, the Cinnabar Mansions, and the perspective of Catherine, a woman taken as a girl from her home by a group of missionaries “saving” young Dai Viet girls, wiping their memories, and taking them to the Galactic Empire. Lan Nhen and Cuc travel to a derelict ship ward in outsider space to try and return the Mind of their great-aunt, as Catherine increasingly has embodied memories of her past as she reflects on Galactic society. The story ends with the reveal that Catherine is actually Mi Chau, the great-aunt that Lan Nhen and Cuc are seeking. Rather than the Galactics rescuing her from the fate of birthing Minds for ships, Mi Chau is a Mind that has been placed in the body of a young Dai Viet woman.

Catherine’s story takes place in the city of Prime, the center of the Galactic Federation of United Planets. The Galactic Empire depends on a development narrative of colonization where the belief that Dai Viet incubating Minds in the “wombs of their women” is why each of the young girls brought to the Galactic Empire were taken away, so they ““wouldn’t become brood mares for abominations”” (de Bodard, “The Waiting Stars”). In the Galactic Empire, the bodies of Dai Viet women are seemingly deemed valuable and worth protecting from the pain of birthing a Mind. The categorization of certain ways of thinking about generations and human life as uncivilized is backed by the religious Board of the Galactic Empire, “a redemptionist church

with a fortune to throw around, financing the children's rescues and their education-and who thought every life from humans to insects was sacred" (de Bodard, "The Waiting Stars").

Arguably, essential to the identity of all civilized Galactics then is their relationship to what is "uncivilized." All life as being sacred of course, the belief at the core of the civilizing mission, is called into question by the Dai Viet girls whose memories are traumatically erased, being placed into reeducation camps, and forced to become indoctrinated into Galactic customs and behaviors.

This forced indoctrination happens because as Jason, Catherine's Galactic partner states, "we had to...we had to block your memories, to make you blank slates" (de Bodard, "The Waiting Stars") because "they'd have killed you, otherwise" (de Bodard, "The Waiting Stars"). Catherine was told her thoughts were erased to remove any memory of trauma in her previous life. Yet despite minds easily being programmable, the bodies of Dai Viet women remain integral to the structure of the Galactic Empire. Catherine's sense of personhood forms knowing that Dai Viet girls on Prime were racialized as "squat, darker shapes, at the way their eyes crinkled when they laughed. There were other clues, too: the memories that made Catherine wake up breathless and disoriented" (de Bodard, "The Waiting Stars"). The Dai Viet's first sense of identity in their erased minds comes from an understanding of their body as othered, which consequently Catherine also sees as holding a relationship to traumatic memory. Upon interrogating Jason about her body, arguing that her physical appearance could have easily been made Galactic if her mind had, he states, "that's your body, Catherine. Of course they weren't going to steal that" (de Bodard, "The Waiting Stars"), to which she replies "you draw the line at my body, but stealing my memories is fine?" (de Bodard, "The Waiting Stars"). Imagining what it means to be posthuman in the Galactic Empire then means bodies matter more than ever, even though minds are presumably easily erased and reprogrammable through reeducation,

forced isolation, and videos doctored to represent the Galactic history of colonization. De Bodard touches on the Galactic Federation of United Planets' history as descendants of an "Exodus fleet that had hit an isolated galaxy: left to themselves and isolated for decades, they had turned on each other in huge ethnic cleansings before emerging from their home planets as relentless competitors for resources and inhabitable planets" ("The Waiting Stars"). Racialization then is a technology in and of itself, that has emerged and been perfected within the Galactic niche of the universe. Racial violence on Galactic turns outward in the form of the interplanetary accumulation of capital and real estate. Under a narrative of development and freedom where the mind can easily move between forms through new posthuman technology, racialization matters more than ever to secure the interests of the Galactic Empire, dependent on a feminized and racialized workforce.

De Bodard's future world that disrupts and aligns with a history of Vietnam is important for understanding the ways in which women in the Xuya universe of stories are enfolded within the structures of Galactic militarism. In *The Gift of Freedom*, Mimi Thi Nguyen identifies the wars in Southeast Asia and Vietnam as events that lead us to "query what messages of power are transmitted through the gift of freedom" (23). It is through this lens that Nguyen historicizes the Vietnam War, seeing the Cold War United States, centering Vietnam as the source of the "communist problem," through proxy war.³⁶ It is through the imagining of crisis that militarism

³⁶ Nguyen states, "as the defender of the 'free' capitalist world, then, the United States during the Cold War justified its campaigns throughout Asia in response to anti-colonial struggles and decolonization movements where those struggles and movements rendered those places deficient in proper governance and disqualified from the rights of sovereignty, and hence

is mobilized in relation to what lives are free and unfree, worthy of life and death, to align with the ways in which the state polices genres of the human and non-human. These categories for Nguyen, are the basis of a liberal imaginary that sees liberalism's benevolence through what is moral. As discussed previously, the Western genre of human moves through time, defined by the needs of capital accumulation. The body of the "other" is always a contested figure, being made in formation with the interests of the state. For Nguyen, the idea of freedom is the most important register through which Vietnam is imagined and access to the genre of human is controlled, with the promise of securing freedom for everyone the world over. The project of defining some lives as unworthy of protecting makes whiteness centralized and accepted as fully human. Particularly within the context of the Vietnam War, a war that the United States didn't emerge as a protector and benefactor, the figure of the Vietnamese refugee is what Y n L  Espiritu calls the "key to the (re)cuperation of American identities and the shoring up of U.S. militarism in the post-Vietnam War era (*Body Counts 2*). In de Bodard's short stories where many Dai Viets arrive in Xuya and a Galactic culture continues to colonize Dai Viet space stations, opportunity and "development" are the structures in which the Dai Viet are understood as refugees in the eyes of the colonizer.

susceptible to occupation and control by other powers...the war in Viet Nam and its aftermath illuminate for us the conditions of possibility that structurally link new forms of action with emerging configurations of violence and power, in which managing the 'crisis' of the human requires the mobilization of both armies and aid" (23). See Nguyen, Mimi Thi. *The Gift of Freedom: War, Debt, and Other Refugee Passages*. Duke University Press, 2012.

It is through this framework in relation to Vietnam that the United States gets removed from the links that tie the global historical conditions that produce the problem, through the refugee that must perform their gratitude. In this sense, the Vietnamese war refugee becomes doubly invisible through the global conditions of capital that produce war and through the ways in which the Asian body becomes racialized in the United States as naturally able to be more easily exploited for certain kinds of labor. This hypervisible figure of the refugee post-1975, racialized to become symbolic and necessary to the United States' rationale for war, is simultaneously invisible to forget alternate ways of understanding the Cold War, enabling the United States to "represent itself as a refuge-providing rather than a refugee-producing nation" (Espiritu, *Body Counts* 40). Under this understanding of the grateful refugee, imagined as existing in a state of crisis requiring the Galactic Empire's intervention, resource and labor extraction is made invisible. Small, foreign, and female in this sense operates to secure the identity of the Asian woman, becoming a racialized visual that tethers the history of interplanetary accumulation into place by essentializing these racial and gender descriptors as being bound up in the civilizing mission. In "The Waiting Stars" female refugee bodies are made hypervisible as other in order to place them within the racializing structure of empire.

Dai Viet women serve to erase a Galactic history of conquest through their visual presence. Subsequently, the racializing and gendering of the body then also places Catherine within the confines of capital and domestic labor. It is only young girls, rescued from the fate of Mindship birth, that come to Prime to have their minds reprogrammed. When Cuc and Lan Nhen discover that their great-aunt has been transplanted from their family and familiar planet onto Prime, Cuc states that she is "in a terminal or as the power source for something" (de Bodard, "The Waiting Stars"). Lan Nhen asks why they would go through that trouble, "it's a lot of

power expenditure just to get an extra computer” (de Bodard, “The Waiting Stars”). While the power required for an extra computer for a Mind confuses Lan Nhen and Cuc, the function of Catherine’s mind and racialized and gendered body on Prime performs a critical and invisible labor, essential to the structure created by the Galactics. The small, foreign, and female not only turns Galactic ideology into a question of development and underdevelopment, necessitating conquest, but also makes invisible and justifies the gendered labor performed by women in the Galactic economy. The idea that certain bodies are less human, naturalizes this category and feminizes certain types of labor.

Catherine’s closest friend from the institution, Joanna, reflects simply on the entrapments of the Galactic system, “Work. Love. Meaningless” (de Bodard, “The Waiting Stars”). Her comment speaks to the society that the Dai Viet enter after their reeducation in the institution. After being forced into “proper” behavior through deprivation and violence, where their mannerisms for the slightest infraction such as speaking anything other than Galactic, refusing to eat Galactic food, not remembering Galactic history, or even holding on to one another to keep warm and survive—is met with militarized discipline, “scolding them for behaving like wild animals” (de Bodard, “The Waiting Stars”). To become gendered as proper Galactic women, Dai Viet girls are punished for their memories, cultural identities, and kinship with one another and then enter the workforce where they are assigned jobs with the official titles of journalist or archaeologist, but always also through the institution of marriage.

Intimacy as a Function of Empire

The most essential form of labor that is tied to the gender and racializing function of small, foreign, female is, as Joanna states, love. On Prime, Dai Viet are educated into being

proper Asian women, surveilled for their role in the institution of marriage. Catherine and Jason's relationship highlights the ways in which love is never outside of the power dynamics of the Galactic Empire and intimacy within these dynamics can also be a way of enforcing what is normative behavior. By seeking to enfold Catherine within an institution like marriage, alongside other types of labor, Galactic control seeks to define Catherine's capacity to be a full liberal subject through participation in institutions that make women's labor invisible. However, Catherine is always marked as other through her physical posthuman form, forever seen as an outsider and never able to arrive and achieve full liberal personhood.

Jason's care for Catherine is felt in her attachment for him, even Joanna despite her dislike of him comments on his deep affection and kindness toward Catherine. His reassurances when things go wrong, his gifts, and other acts of care makes Catherine feel like "everything was going to be fine" (de Bodard, "The Waiting Stars"). Yet when Catherine's desire to go to space for work, like the wish of many Dai Viets, gets denied for a job close to the institution, she knows that Jason has had a hand in this assignment. The affection and love she has for him moves out of focus and she is reminded that he works for the "Board for the Protection of Dai Viet Refugees; that he'd had a hand, no matter how small, in denying her wishes for the future" (de Bodard, "The Waiting Stars"). His job within the very institution that denies her mobility and traps her within the system itself, can't be separated from the way this rejection of her desire to explore space and potentially get closer to returning home, is also present in his control of her mobility in the relationship. Her new posting is only a few blocks away from the institution, close to her and Jason's flat, locking her within a life of proper, gendered labor and domesticity. Upon receiving news of her posting, Jason responds by saying he can't do anything about the Board, but he can "however, make sure that you have a good time tonight" (de Bodard, "The

Waiting Stars”). Jason’s position within the governmental agency and the proper roles that Dai Viet women are allowed to fill within the Galactic economy is a space mediated by marriage. Jason attempts to make things okay for Catherine when she realizes she won’t be able to be closer to what she feels connected to—space and her desire to experience weightlessness toward the diaspora. He suggests that if she can accept the terms of her posting, then it will eventually be tolerable because of the life it allows her to have with Jason. This suggests that fulfillment for Catherine should come from the space of intimate relationships and the domestic rather than her desire to explore questions that might bring her closer to her home.

In *Desire/Love*, Lauren Berlant writes of the ways in which romantic desire is often a placeholder that serves as an affective framework to express other desires for institutional longings. Catherine’s expression of love for Jason, might be read as a desire to be seen outside of the way she is seen as not-quite human, trapped in another’s body. Berlant writes that desire misrecognizes what will restore what “you sense effectively as a hole in you. Your object, then, does not express transparently who you ‘are’ but says something about what it takes for you to anchor yourself in space and time” (76-77). Interestingly here, Berlant also uses the notion of floating through space to talk about desire. For Catherine whose body seeks to float toward the stars, rather than be anchored in a physical form, love is a trapping for Dai Viet women who are seeking to anchor their desire and repair the trauma of their birth and embodiment as a Mind by floating outward rather than becoming an object desired. Catherine’s position within Galactic society isn’t just upheld in the trappings of work, as Joanna pointed out, love too is also “meaningless” (de Bodard, “The Waiting Stars”). Joanna’s comment points to the ways in which love is labor and Catherine’s role as a romantic partner to Jason is something that also is invisible, gendered labor that is a function of empire. Her domestic duties and emotional labor in

the space of her marriage maintain norms around Galactic masculinities and confine her in a heteronormative relationship that isolates her from other ways of relating to Dai Viet women.

Catherine feels that Jason makes her feel that “nothing else but her mattered in the entire world” (de Bodard, “The Waiting Stars”), their private and intimate relationship between solely the two of them stands in contrast to an alternate version of intimacy and love that the Dai Viet see as intergenerational. Despite sharing an intimate bond, it becomes apparent that Jason’s loving concern can at times operate as a form of surveillance and control, normalizing the Galactic colonizer’s mentality within the space of the private relationship. When Catherine pushes up against the role of Dai Viet women living in Prime, Jason states, ““we had to...they’d have killed you, otherwise. You know this”” (de Bodard, “The Waiting Stars”). He believes there was no other option asking, ““do you think it makes me sleep better at night? Every day I hate that choice, even though I wasn’t the one who made it. Every day I wonder if there was something else the Board could have done, some other solution that wouldn’t have robbed you of everything you were”” (de Bodard, “The Waiting Stars”). Abdicating himself from Galactic society and the structure that benefits from turning Dai Viet Minds into othered, female bodies, Jason sees himself and his romantic relationship to Catherine as outside of the structure. He doesn’t acknowledge how he participates in robbing Catherine of what she is in the way he is situated in relation to her embodiment. Catherine asking Jason why the Galactic did this and critiquing the circumstances of her being on Prime, is something that she begins to see as not being able to be separated from the romantic. Yet her accusing and implicating Jason, touches a place in him, where she “scratch[es] some skin to find only primal reflexes underneath” (de Bodard, “The Waiting Stars”). Catherine sees in Jason an instinct deeply seeded, where she sees his face “transfixed by light, by faith...every pore of his being permeated by the utter conviction

that he was right, that they were all right and that a stolen childhood was a small price to pay to be a Galactic” (de Bodard, “The Waiting Stars”). This violence is masked by institutions of intimacy and marriage where marriage being wrapped up in desire and feeling, erases the institutions that surveil it. Catherine is placed within the body of small, foreign, and female, forced to uphold empire’s convictions through the relationship of her body to Jason.

However, Catherine pushes up against her relationship with Jason and her own embodiment. Jason’s validation in his position of power is justified by needing to keep the Dai Viet alive by “saving” women from the horrors of birthing Minds. Development and underdevelopment operate under the ability to give and take away life, to define the parameters of who gets to be human. At the end of “The Waiting Stars” Joanna takes her own life. Catherine responds to Jason’s remarks around redeeming Dai Viet girls with ““perhaps we didn’t want to be alive”” (de Bodard, “The Waiting Stars”). In this moment Catherine reflects on the ways in which what it means to “be alive” in the Galactic Empire, eliminates the possibility of thinking about life in other terms. Catherine, a Mind born into a Dai Viet family without a human body, pushes up against Jason’s humanist assigning of worth to bodies, where ““everyone deserves to live. You especially”” (de Bodard, “The Waiting Stars”), reinscribing the binary of being allowed to live and die, forcing Catherine into a performance as a grateful refugee. Catherine’s remarks around rejecting being alive in this moment is about rejecting the categories that define who is human, almost human, and not human. The contradictions of Dai Viet embodiment, where to exist as a Galactic, the body must be incorporated as small, foreign, and female, opens up the possibility of critique for the identity categories that are vying for access and equality into a system built through military conquest and racial capitalism. What is the promise of freedom guaranteeing for bodies that are inherently not free? The liberal imaginary of freedom does more

to naturalize and mediate memory in relation to structures of government. The promise of freedom can make the body less free, in its demand that it constrains itself and performs a function for the nation, becoming invisible. As Catherine contemplates the right to live and let die, as a form of agency within her marriage, she seeks to claim her body back in the ways in which it becomes enfolded within as small, foreign, and female behind notions of domesticity.

Floating Toward Bodilessness

The racializing structure that Dai Viet women are placed within on Galactic is enforced by institutions like the Board for the Protection of Dai Viet Refugees, overseeing job placement and marriage. Yet despite the institutional reinforcement of a certain relationship to the body, “The Waiting Stars” explores the possibilities for agency and resistance by rethinking the terms of embodiment and what is remembered. As the story continues, Catherine’s nightmares increase and memories of her first days on Prime become inescapable. At first, she thinks these nightmares are related to the videos that all Dai Viet refugees are forced to watch when they come to Prime, showing them the “horror” of birthing a Mind. Yet as the dreams begin to seep into Catherine’s thoughts throughout the day, she thinks about the video:

the *thing* crawling out of the woman’s belly, all metal edges and shining crystal, coated in the blood of its mother--and, for a moment she felt as though she were the woman--floating above her body detached from her cloak of flesh, watching herself give birth in pain. And then the sensation ended, but she was still feeling spread out, larger than she ought to have been--looking at herself from a distance and watching her own life pass her by, petty and meaningless, and utterly bounded from end to end. (de Bodard, “The Waiting Stars”)

The videos of birth that the Board use depend on women's bodies. Galactic colonization is justified through the need to save Dai Viet women, defining militarized masculinity in relationship to the helplessness of Asian women. Yet in this moment as Catherine thinks about the birth of Minds, she feels as though she becomes the woman she visualizes. The Galactic visual doesn't control the way she sees her own body, instead she floats outside of it and becomes embodied through memory into something else. When the sensation ends, she still has the memory of the sense of her body as being more expansive than she thought. The memory begins to detach her from the body she is placed into, where she begins to see the Galactic structure itself as temporally bound.

This memory increases throughout "The Waiting Stars" and begins to attach itself to a physical feeling Catherine feels in her belly. This sensation of dislocation in her belly goes along with a feeling that she doesn't belong that "her own life should have been larger, more fulfilling than this slow death by inches, writing copy for feeds without any acknowledgement of her contributions" (de Bodard, "The Waiting Stars"). The awareness that she can't leave intensifies the feeling of nausea in her belly that "will not go away: instead it spreads, until her body feels like a cage...until it's an effort to move any part of her. She raises her hands, struggling against a feeling of moving appendages that don't belong to her" (de Bodard, "The Waiting Stars"). Trapped in a body, time measured as death by inches, keeps her bound to her labor and capital. The feeling of expansiveness, reaching outside of even her physical form makes her hyper aware of feeling like even the appendages of her physical body aren't hers. While the memory of birth is meant to make Catherine a grateful refugee, it instead reminds her of her expansiveness and the way bodies themselves are anchored to the conditions of capital. As Rachel Lee discusses in *The Exquisite Corpse of Asian America*, Asian American studies is engaged with the questions

that emerge from the tensions between the figure of the coolie or immigrant, in terms of how Asian bodies are deemed human/nonhuman alongside the binary of citizen/noncitizen. Approaches to Asian American studies that are concerned with the tension between the biological and the political economy, uniquely situate the field to think about the possibilities for the body that are enfolded within historical, racializing structures.³⁷ Catherine's body, reaching outside of the racializing structure she is placed within, demonstrates her awareness of the racial forms Asian bodies take, reaching for another kind of embodiment outside of the terms of human/posthuman. Rather than fully human encouraging a kind of desire, Catherine's realization reveals the ways in which refugee bodies are denied access to the fully human, where a failure to assimilate becomes the problem of the refugee rather than the system itself.

The feeling of being without a body, of recognizing the terms of Catherine's own embodiment occurs parallel to Lan Nhen and Cuc's mission to return their great-aunt, releasing her from the abandoned ship ward. Aboard the family ship, the Cinnabar Mansions, we begin to see the Dai Viet relationship between family across generations and the Minds for ships that are birthed. The Mind of ships like the Cinnabar Mansions are guided to adulthood and taught by the Dai Viet mothers that birth them. Lan Nhen and Cuc's relationship to the Mind of the ship is beyond a generational difference where, "the pronoun 'child' seemed small and inappropriate to express the vast gulf of generations between them" (de Bodard, "The Waiting Stars"). The Mind of the ships express a relational orientation to family and time, holding onto familial memories and outliving current generations as a witness to multiple generations. In contrast to Galactic

³⁷ See Lee, Rachel C. *The Exquisite Corpse of Asian America: Biopolitics, Biosociality, and*

Posthuman Ecologies. New York University Press, 2014..

ideas around life that are bound by birth and death, the Dai Viet have a connection to a Mind that sees and remembers time all at once. When remembering and historicizing becomes something that is ongoing, outside of being seen as strictly linear, new orientations to one's own body emerge, removing some of the ways of thinking about racialization in terms of underdevelopment. As aforementioned, reorientation as Sarah Ahmed states creates speculative possibilities for where the body might go. If bodies in relation to heteronormative relationships—described as loving or intimate—are oriented toward one another and unable to think about the power dynamics at play or the functions and narratives of empire that work through domestic spaces, reorientation as bodilessness seeks to reposition oneself toward relationships between other women, across time.

The desire for a certain state of bodilessness that Catherine simultaneously narrates in relationship to her experience of seeing the stars suggests a speculative imagining of what it means to be embodied. The Dai Viet on Galactic had always “felt at ease under the stars – had always yearned to take to space, felt the same craving to be closer to their home planets—to hang, weightless and without ties, in a place where they wouldn't be weighed, wouldn't be judged for falling short of values that ultimately didn't belong to them” (de Bodard, “The Waiting Stars”). The space and stars become a sort of refuge for Catherine, a speculative arena where she imagines her body without weight. Weight in this sense doesn't mean freedom from a physical body that can suddenly cease to matter, but weightlessness brings with it a removal of values and structures that don't belong to her. Consequently, this imagining is almost impossible on Prime, where the development of the urban center, makes it so there are “too many lights to see the stars” (de Bodard, “The Waiting Stars”), yet Catherine “could still guess; could still feel their pull—could still remember that one of them was her home” (de Bodard, “The Waiting

Stars”). This pull of home, connecting Catherine to a larger diaspora, despite not connecting her to a physical human form is described as an embodied memory, pulling, and creating a feeling in her belly. This connection to a home within the larger diaspora, that exists deep in her gut, is an embodied feeling that can’t be taken away by Galactics and their enforcement of proper racialized forms and memory. For Catherine, what she feels in her body ties her physical form to memory.

Once aboard the ship in outsider space, Cuc guides Lan Nhen toward the Mind of their aunt. Once located, Cuc finds that outsider data is still being broadcast intensely across the ships, despite Lan Nhen and Cuc believing that the Galactics had no use for the abandoned ships anymore. Lan Nhen finds that “outsider technology had crawled all over her great-aunt’s resting place, obscuring the Mind and the mass of connectors that linked her to the ship” (de Bodard, “The Waiting Stars”). Covered in layers of cables and equipment, Lan Nhen undergoes the task of physically removing the technology atop her great-aunt as Lan reprograms the static in the heart room, “a throbbing song that erased every coherent thought from her mind” (de Bodard, “The Waiting Stars”). As Lan Nhen and Cuc successfully remove the layers of wires that are blocking the Mind, Catherine, who now remembers her name is Mi Chau, begins to see that “she is more than this body; more than this constrained life--her thoughts spread out” (de Bodard, “The Waiting Stars”). Her release from the noise being broadcast brings with it memories of being a Mind and the:

Family reunions, entire generations of children putting their hands on her corridors, remembers the touch of their skin on her metal walls; the sound of their laughter as they raced each other; the quiet chatter of their mothers in the heart room, keeping her company as the New Year began; and the touch of a brush on

her outer hull, drawing the shape of an apricot flower, for good luck... (de Bodard, "The Waiting Stars")

Mi Chau's memories remain tied to something physical, but she becomes free of her human body and the way she has been racialized and temporally situated on Prime. The memories that arise are also tied to a new orientation to family, one where her physical memories are filled with a sense of family and care that can happen because of what her role as the Mind of the family's ship allows her to contain within the ship's walls. Mi Chau's sensory memories of family within the walls of her embodied ship humanizes the ship and makes it come alive. For Mi Chau and other Dai Viet, the ship is part of the family structure, carrying with it memories across generations. Not only are the Minds of ships cared for when they are first created by the family, the Minds then power a ship that cares for families across multiple generations, holding all memories and registering these moments to temporally situate the Dai Viet within a nonlinear understanding of time, outside of the Galactic temporal understanding of the past and future as one that strictly pertains to progress and development. This is essential when thinking about how memory in the Galactic empire controls the past; the minds of Dai Viet women are erased of all memory of who they are or where they come from, in order to become re-embodied within a racializing structure.

This specific memory of an embodied ship holding and caring for generations of family runs counter to the Galactic narrative of Dai Viet women who barbarically birth Minds to simply power their ships, suggesting an alternate relationship to motherhood and family kinship. As Mi Chau's mind is released, she sees the stars superimposed with the faces of:

two Dai Viet women, calling her over and over. Calling her back, into the body that belonged to her all along; into the arms of her family... "come on, come on,"

the women whisper, and their voices are stronger than any other noise; than Jason's breath in the bedroom; than the motors of the floaters or the vague smell of garlic from the kitchen. (de Bodard, "The Waiting Stars")

Mi Chau's relationship to the other women in her family in "The Waiting Stars" pulls her back to a sense of a body that was there all along. Her awareness of all other senses, the sound of Jason's breath or the smell of garlic, fades into the background as her sense of embodiment becomes understood as a relational identity. Rather than a heteronormative space of the domestic on Prime, constricting her labor and ways of showing and defining love, Mi Chau's body as small, foreign, and female comes to mean something else. Becoming free of her physical body doesn't change the way Dai Viet women are seen and produced as subjects in the Galactic Empire but it does allow for Mi Chau to relationally construct her identity. Mi Chau returning to her state as a Mind now makes her the holder of generations of family memories and history. Through Cuc's subversive reprogramming of the Galactic tampering of Mindships, Mi Chau speculatively turns to the stars to think about embodiment outside of planetary capitalism. This imagining of weightlessness in space, briefly floating outside of any terms of racialization, is an imagining of alternate terms of physicality, outside of the genres of human. For Mi Chau and Joanna, as well as other Dai Viet women, the erasure of memories and the trappings of embodiment can't contain memories of the tactile memories of their time as Minds. The confines of the physical body on Galactic create a disassociation in Mi Chau and Joanna that becomes a site of resistance. Never fully being inside their physical body and within the structures of marriage, labor, and religion that enforce their movement, allows Mi Chau to be outside of herself, opening possibilities to see how her own racialization and gendered experience are something socially and historically generated. The speculative imagining of free floating toward the waiting stars is

a way to generate a new speculative future, one that doesn't disregard the ways in which the genres of human have been violently defined, but one that seeks to remember differently as it floats and seeks other ways of being embodied.

Immersive Technology and Erasure

In "The Waiting Stars" to be visually enfolded within a racializing structure is a necessity for Minds to be transplanted and placed in physical bodies. Bodies matter to reproduce and enforce categories of the human. However, in another pocket of de Bodard's Xuya universe, "Immersion" takes place where posthuman form in relation to Asian racialization doesn't mean the transplanting of consciousness into new bodies but rather technologies that allow bodies to appear other-raced because of augmented reality technology. Throughout this corner of de Bodard's Galactic universe and Longevity station, the wearing of "immersers" is enforced. These devices, a product of Galactic technological innovation, have the capacity to change and normalize to Galactic standards physical appearance, sensorial experiences, spoken language, and even thought. While worn by almost everyone, the thickness of the layer of augmented avatar that covers one's physical appearance and wraps around thoughts is varied. Immersers worn by Galactics on Prime are often thin, barely covering up the body underneath. However, for Asian women's bodies throughout the story, immersers are used more intensely to either appear more white or hyper-oriental. The short story takes place on Longevity, a space station that faces a gradual destruction of its culture due to its position in the Galactic trade network. Longevity station exists for the Galactics to extract transnational, gendered labor—specifically within "Immersion" for the purposes of tourism. De Bodard stated that "Immersion" emerged for her from wanting to write a story about cultural domination and "how the cultural norms from the

dominant culture also infect the non-dominant ones; about how globalisation and its products don't necessarily make the world smaller and communications between cultures easier, but tend to foster a harmful atmosphere in which one culture or subset of cultures (US/Europe, to be specific) takes over the existing ones and remakes everything in its image" (de Bodard, "Author's Notes for 'Immersion'"). On Longevity, this domination happens through tourism where Galactics visit the colonized station to experience the "other" where rather than connecting cultures, the Galactic trade network has the effect of changing what it sees through tourism to fit in with what they need to justify their exploitation.

The unbalanced cultural exchange of tourism reflects a dematerialized notion of culture experienced through travel, distilled to make invisible unbalanced cultural exchange and the power dynamics of the political economy. It is within this context that de Bodard's explores the characters Agnes and Quy through alternating perspectives that tell the story of Agnes' visit to Longevity with her Galactic husband Galen, and Quy's experience meeting Agnes when she comes into her family's restaurant. Like the ways in which Lan Nhen and Catherine/Mi Chau relay the events of "The Waiting Stars" through alternating perspectives, de Bodard sets up the story from these perspectives to think about how small, foreign, and female is experienced as being made other and forced to assimilate to whiteness or being made other and expected to perform a kind of racial drag for the white tourist gaze. These two racial formations exaggerated through and reinforced with augmented reality technology, are necessary for the Galactics' notion of empire. However, like the alternate forms of embodiment in space and space stations imagined in "The Waiting Stars," the characters of "Immersion" imagine other forms of subversive agency for small, foreign, and female as they reprogram technology.

Augmented Assimilation of “Immersers”

Agnes arrives on Longevity with her husband Galen—a Galactic businessman visiting Longevity to scout Quy’s family’s restaurant as a potential venue. Agnes’ immerser has embedded itself in her mind and physical appearance so densely behind layers of augmented reality that she operates as though she is drugged, barely able to register her own movements or speech. When Quy sees Agnes at her family’s restaurant she “looked at the woman for the first time—and flinched. There was no one here: just a thick layer of avatar, so dense and so complex that she couldn't even guess at the body hidden within” (de Bodard, “Immersion”). For Agnes, the immerser at one point was something that gave her “context about everything, opening up the universe like a lotus flower” (de Bodard, “Immersion”). The machine controlling thought through language was a tool that became a necessity to her as she navigated her marriage to Galen and life as an immigrant on Galactic. However, Agnes’ use of the immerser to survive on Prime, eventually required her to adapt more and more queues set forth, that the immerser began to hook into the mind, instigating a slow and violent form of cultural forgetting. At one point on Longevity, Agnes realizes she has forgotten her language, describing the feeling of the immerser queuing her speech where she “trips over the word—there’s a structure you should have used, a pronoun you should have said instead of the lapidary Galactic sentence” (de Bodard, “Immersion”). Her physical appearance also changes as she wears thicker and thicker layers of augmented reality to appear with freckled skin and red hair. Although its apparent to those who see those with thick layers of immerser, that it isn’t what the users actually look like, Agnes adapts her avatar body to approximate whiteness, despite always being seen as other. It is never mentioned that anyone on Prime or Galen strictly requires this from Agnes, however, her use of

the immerser—necessitated by how she is racialized on Prime—points to the ways in which the possibilities of posthuman form, always defaults to whiteness.

While in “The Waiting Stars,” Minds are placed into posthuman bodies on Prime and racialized and gendered as small, foreign, and female, some Asian bodies on Prime like Agnes in “Immersion,” operate within technology’s posthuman form by being forced to approximate whiteness. Always being seen as other and trapped within technology that approximates the dominant while slowly destroying memories, Agnes’ use of the immerser points to the failed promise of assimilation that in trying to get closer to what is Galactic, she begins to lose her memories and own forms of self-identification in relation to the body within.

This racializing structure is a violence that creates a disassociation between the mind and body that assumes that if one changes the body, they can also change the mind. However, Agnes’ understanding of her body as she observes herself in the third person suggests that this isn’t possible; to change the body is to change the mind. Agnes reflects in the third person that:

you’re no longer quite sure who you are. You stand in front of the mirror—it shifts and trembles, reflecting only what you want to see...for a moment, as you turn away from the mirror, the glass shimmers out of focus; and another woman in a dull silk gown stares back at you: smaller, squatter and in every way diminished—a stranger, a distant memory that has ceased to have any meaning.
(de Bodard, “Immersion”)

The inability to physically recognize her own body, translates also into a buried memory that reemerges as the glass shimmers. Agnes now exists as two split selves, solidified in the telling of her story from the third person perspective, where in trying to make her body more Galactic she has stabilized the genres of small, foreign, and female. For Galactics their position is marked by

the thinner layer of avatar needed to adjust, while it is visible that Agnes and others on Longevity must work harder, laboring to maintain the thick layer of avatar. The degree of presence or reliance on Galactic technology to move about the universe, reveals the labor that women like Agnes are tasked with in making themselves measure up to what is Galactic to be registerable through the Galactic's racializing technology.

Alternatively, for Quy, the use of the immerser is something that comes with it an awareness of the disconnect the technology makes her feel. Before working at her family's restaurant Quy travelled to Prime for her education where what "should have been her path into the higher strata of the station's society, had brought her nothing but a sense of disconnection from her family; a growing solitude, and a dissatisfaction, an aimlessness she couldn't put in words" (de Bodard, "Immersion"). Her disconnection from herself and thoughts was the product of schooling meant to indoctrinate her within the Galactic system. The multiple selves she was holding left her with a disoriented sense of dissatisfaction. For Quy now on Longevity, required to wear the immerser for tourists visiting Longevity to appear hyper-oriental for their touristic gaze, the feeling of the immerser wrapping itself around her brain and body is still a feeling she can recognize as happening, where "she could tell the difference between her thoughts and the immerser's thoughts" (de Bodard, "Immersion"). The Galactic tourists that come to Longevity use the technology of the immerser themselves to facilitate a specific experience and filter through difference to experience a commodified version of "culture" without thinking about its relationship to Longevity's colonial history. For Quy the immerser is used and placed on the necessary settings to interact with and accommodate Galactics and perform a hyper-oriental representation to accommodate their expectations for what Asian women "really" are. When Quy uses the immerser, it gives her the "vague sensation of the system rooting around in her brain to

find the best body cues to give her” (de Bodard, “Immersion”), staying on her body throughout her interactions with customers and labor in the restaurant.

However, unlike Agnes, who has travelled to Galactic and now wears a thick layer of avatar, Quy’s augmented avatar is left on a thinner setting. While she is required to wear the immerser to interact and accommodate customers, from Agnes’ perspective, “her avatar is but a thin layer, and you can see her beneath it; a round, moon-shaped face with skin the color of cinnamon—no, not spices, not chocolate, but simply a color you’ve seen all your life (de Bodard, “Immersion”). Racially, Quy can be seen without the layers of avatar that Agnes has worn to assimilate to life on Prime, despite the immerser still controlling the movements and language of her physical body. She gets enfolded into the racializing structure on imperial terms—Galactics only being able to see her through an understanding of tourism that depends on the small, foreign, and female to uphold consumers’ racialized femininities. However, a thick layer of virtual avatar isn’t needed because the Galactic cultural narrative and expectation of tourism operates itself as a layer of immersion. Quy’s labor on Longevity within the restaurant is upheld by the ways in which her subjecthood is defined for her, pointing to how racialization itself is a technology that changes the colonizer’s vision, with or without augmentation.

While the use of the immerser and the degree of self-awareness of its function varies between Agnes and Quy, there is an understanding that the two must work harder to navigate the racializing and gendering structures and technologies of the Galactic empire. Agnes reflects in the third person that:

It's people like you who have to work the hardest to adjust, because so much about you draws attention to itself—the stretched eyes that crinkle in the shape of moths, the darker skin, the smaller, squatter shape more reminiscent of jackfruits

than swaying fronds. But no matter: you can be made perfect; you can put on the immerser and become someone else, someone pale-skinned and tall and beautiful.
(de Bodard, “Immersion”)

Technologies of the human/nonhuman through racialization here are structures that Agnes must navigate as she knows she constantly must work harder to adjust. Despite Quy wearing a thinner layer of avatar, she also understands this through the ways in which her body is racialized and gendered through dematerialized tourism and cultural consumption. Both structures are ones that either disavow the reason for refuge migration to the colonial center or the racialized labor of the colonies, making invisible the labor and power structures of empire.

Intimate Labor, Tourism, and Marriage

The enforcement of wearing the immersers doesn't happen necessarily by any formal state apparatus, enforced by law or the police state. However, the ways in which the cultural forgetting and invisible racialization happens is similar to how the space of women's labor in intimate relationships in “The Waiting Stars” secures a narrative of development and maintains gender roles that produce the normalized category of Asian woman. Galen's travels to Longevity and relationship to Agnes are grounded in the same colonial relationship to understandings of underdevelopment where the:

obsequiousness unnerves him; he always rants about the outdated customs aboard Longevity, the inequalities and the lack of democratic government—he thinks it's only a matter of time before they change, adapt themselves to fit into Galactic society....The Galactics rose against the tyranny of Old Earth and overthrew their shackles, and won the right to determine their own destiny; and every other

station and planet will do the same....It's right; it's always been right. (de Bodard, "Immersion")

Where Agnes once had the words to argue with him, she finds that under layers of immerser she is beginning to see how it has "always been right." The liberal imaginary subsequently defines which bodies are granted a subject identity, strictly understood in terms of who can be "free." The degrees of freedom and unfreedom however for the category of Asian woman, doesn't translate to any kind of freedom from exploitation, on Galactic or elsewhere in the universe, but rather always serves to justify exploitation by distancing gendered tourism and marriage as being a natural kind of relation. In "Immersion" understanding tourism and marriage as within the realm of the political allows for a reading that draws attention to what Cynthia Enloe emphasizes about intimate relationships and personal desire existing within the realm of politics when some racialized femininities and sexual attractions are rewarded, and others are punished. In this sense, "power, taste, attraction, and desire are not mutually exclusive" (Enloe) and Galactic men like Galen in "Immersion" make apparent the ways in which Asian women are caught up in the networks of empire.

At the same time, Quy's experience with tourists on Longevity, reveals another gendered labor of empire that the immersers facilitate. Galactics visiting Longevity as tourists, "put the immersers on tourist settings, they get just what they need to navigate a foreign environment from whatever idiot's written the Rong script for that thing" (de Bodard, "Immersion).

Augmented technology facilitates tourism for Galactics by translating things like written and spoken language with filtered historical context or menus and recommended dishes—including which are more "exotic" and to be avoided. Galactic tourism creates a narrative that divorces Longevity's history of anticolonial struggle and independence from what is experienced as

“culture.” Obfuscating any other economic relationship between the tourist to Longevity and the resident of Longevity that isn’t narrated by an understanding of tourism that is welcomed and in fact needed to sustain the economy, upholds Galactic culture by separating material realities from lived existence. For Galactics visiting Longevity, life can only be experienced through orientalized tourism, specifically facilitated by Asian women’s sexuality and food that presents itself, again through a feminized workforce, as “an exotic feast of unfamiliar flavors” (de Bodard, “Immersion”), only further sustained and reassured by immersers and the varying layers of avatars used to move about foreign environments.

In *Flavors of Empire: Food and the Making of Thai America*, Mark Padoongpatt argues that a specific knowledge that is formed about Thailand, Thai people, and Thai culture in the Cold War era emerged out of cultural production, education, and militourism that is expanded on by a tourist industry and tourism-based economy. U.S. tourists takes on a new function in the postwar era as they are encouraged to travel and become diplomat-like representatives of America in order to participate in a “culture of containment [that] would allow the United States to demonstrate to the world, especially amid rising anticolonial movements in the ‘darker nations,’ that it would lead not with force but by integrating Asia and the Pacific under U.S. influence and benevolence” (Padoongpatt 38). Travel was seen as an effective means of economic development, where profits were to be made in Asia and the Pacific where those who wanted to profit needed to sell dematerialized culture. Food in this sense is something that is packaged and sold as an exotic, unfamiliar sensorial experience on Longevity, that has a role in constructing proper desire and idealized images of how spaces should be narrated and consumed. Furthermore, it turns Longevity, through places like the restaurant in “Immersion,” into a service-based economy that reinforces colonial dynamics.

The Asian female body performing intimate labor as a wife, gets swallowed up into the sphere of the domestic, and normalized as invisible through the Galactic colonial mentality with technology that depends on racializing and gendered structures to exploit the labor of the domestic and of tourism. While Quy's feminized appearance in relation to tourism, guarantees a certain hyper-oriental experience on Longevity for Galactic tourists, Agnes' appearance is covered and covered until the immerser wouldn't come off anymore. Agnes finds that when she lost her job with a tech company on Prime, she started to become a ghost of herself. She reflects in the third person, "you thought it would please Galen if you spoke his language; that he would be less ashamed of how uncultured you sounded to his friends" (de Bodard, "Immersion"). While the enforcement of wearing the immerser on Longevity by Quy is surveilled and linked to tourism, for Agnes, although her wearing of the immerser isn't necessarily the result of direct coercion, wearing it becomes more and more of a necessity as she enters the sphere of the domestic. Furthermore, becoming a wife to a Galactic man, has a physical effect on her body as she wears the technology, "from time to time, interpreting this and this body cue, nudging you this way and that—you must sit straight and silent, and support your husband" (de Bodard, "Immersion"). While her physical appearance isn't visibly marked as other, at least on first appearance, Agnes' body is made invisible and nonhuman through the technology that takes over her physical movements to gender her into proper Galactic femininities. Her body, when subsumed uncritically within the cues of Galactic technology, is mechanized and feminized to support her husband, being made nonhuman through technology. However, as Judith Butler argues in *Gender Trouble*, gender is tied to the political and cultural intersections in which it is produced. Pointing to the ways in which embodiment is constrained by the settings in which it functions, creates possibilities for subverting and challenging naturalized categories by pointing

to its illusions.³⁸ The very notion that Agnes' body must be told to perform certain femininities, ironically opens the performance of these movements as not being naturally feminized, but rather forced traits. Small, foreign, and female reveals itself as a kind of structure, programmed by Galactic technology, that can then think about its own making to destabilize the literal posturing of Agnes' gender.

New Bodily Forms

However, despite the ways in which small, foreign, female is enforced through the immerser and the Galactic technology that stabilizes whiteness as the default, possibilities for other forms of embodiment again emerge that seek to make material alternate subjectivities and understandings of racialization. In *Ornamentalism* Anne Cheng thinks about the knowledges that form from the space of the racializing genres of the human and not-quite human. She writes of the aesthetic representations of the sexualized yellow woman, denied full liberal personhood, who becomes an aesthetic object that simultaneously troubles the very truth of what she calls her "ornamentalism." Cheng states that the figure of the Asian women puts the modern ideal of personhood as a full, individual person into crisis "precisely at the interface between ontology and objectness, animated by the ornament, that we are most compelled to confront the horizons and the limits of the politics of personhood" (446). For Cheng, the space occupied by being deemed not-quite human enough, brings with it the possibility to challenge liberal structures of personhood. For Agnes and Quy, the augmented technology of the immerser forces them to

³⁸ See Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. New York:

Routledge, 1999. Print.

constantly be confronted with the aesthetic representations of their sexualized, yellow womanhood—consistently being deemed not white enough, either demanded to be erased or made hypervisible. However, this aesthetic, ornamental form brings with it possibilities to understand racial form across the various Asian diasporas of de Bodard's universe, allowing women to develop their own subjectivities out of the space of belonging/unbelonging.

As the story continues, Quy works to pull Agnes out of her dissociative state. She runs to Agnes in the restaurant as she stands beside Galen to tell her “‘you’re not alone’” (de Bodard, “Immersion”) in their language of Rong, which immediately creates a disjoint in the immerser. Agnes struggles to find the right way to address Quy, remembering the unfamiliarity of the right pronoun to use when she hears someone on Longevity say, “older sister.” Agnes struggles for words, “but all the immerser seems to suggest to you is a neutral and impersonal pronoun, one that you instinctively know is wrong” (de Bodard, “Immersion”). Becoming removed from her own language, the inability to form a kinship relation with Quy using a familial pronoun like “older sister” creates a disconnect in Agnes mind. As these moments continue, Quy continues to tell Agnes to take off the immerser repeatedly and “as an impulse, she grabbed the other woman’s arm; felt her hands go right through the immerser’s avatar, connect with warm, solid flesh.” (de Bodard, “Immersion”). At the end of the story when Agnes begins to return to take control of her body, she recognizes a strength within herself brought on by the “tantalizing smells of food—of lemongrass chicken and steamed rice, just as your mother used to make” (de Bodard, “Immersion”) that physically leads her to follow Quy and turn away from her husband, with a new power taking control of her body.

These moments of connection, of physical touch with the “solid flesh,” of language to categorize and understand relationships, and the smells of the restaurant and foods which Agnes

reflects on being immersed in throughout the story, make physicality matter. In the same way that Katherine in “The Waiting Stars” wishes to experience bodilessness through imagining floating toward home, Agnes experiences a return home through a regrounding in a bodily form. The familiarity of the smells of food, the touch of a hand on her arm, and the sound of familiar language all draw Agnes attention to the relations of power that are present and at odds with her virtual self. For her, language, touch, and food reground the body in memory and in ways of existing that bring back her strength and reorient her body. However, this return to bodily form isn’t about returning to a racialization that is used as a tool of disavowal, the body that is returned to is one that is understood in relation to intergenerational care and kinship formations between women that resist the ways in which Asian women’s bodies have been violently oriented toward whiteness through technology. The physicality and sensorial experience, that occurs alongside Quy and Agnes being made ornamental, reveals the types of knowledges that form in relation to multiple selves. The parallel narration between Quy and Agnes, reveal how both narrators have existed in a universe that marks them as other; the way they have survived and developed their own subjectivity out of belonging/unbelonging has depended on their reliance on Galactic tech.

“Hacking” a New Shared Reality

Technology begins to come apart through Quy and Agnes’ relationship, dismantled by the hacker figure of Tam, Quy’s sister. Tam whose “work was network connections and network maintenance within the restaurant; her hobby was tech. Galactic tech. Tam took things apart to see what made them tick; and rebuilt them” (de Bodard, “Immersion”) has a project throughout the story of taking apart the immersers and laying out the pieces in the family’s residence at the

back of the restaurant to understand and reprogram them. The starting point for her to map out the reprogramming of the immerser is another device called the Artificial Literature Writer that creates entertaining novels for mass consumption. Tam explains that this device:

‘Takes existing cultural norms, and puts them into a cohesive, satisfying narrative. Like people forging their own path and fighting aliens for possession of a planet, that sort of stuff that barely speaks to us on Longevity. I mean, we've never even seen a planet...just like immersers take a given culture and parcel it out to you in a form you can relate to: language, gestures, customs, the whole package. They've got to have the same architecture.’ (de Bodard, “Immersion”)

The immerser works to take complex structures, histories, and cultures to distill lived experience into a single cohesive, parceled out narrative. The example of fighting aliens for possession, a narrative of conquest that doesn't register on Longevity, shows that cultural understandings of entertainment are artificially produced for political means. The Artificial Literature Writer then must have the same architecture of an immerser that normalizes the set of gendered and racialized relationships produced out of empire. Tam's taking apart of the immerser is an act of deconstruction that works to recode language and Galactic tech to put forth a new way of understanding the material. Tam states that if she can figure out how to rebuild and disconnect the circuits she can give the people of Longevity, “the language and the tools to deal with them without being swallowed by them” (de Bodard, “Immersion”). Tam works to fight against a unified narrative through her taking apart of the “logical circuits” of the immerser. She must understand the language and tools, as well as the mentality of the colonizer to reprogram a technological device and define her own subjectivity. The creation and policing of Galactic culture happens through enforcing proper subjectivities such as small, foreign, and female, and

are needed by the state to create a hegemonic narrative of citizenship and forward moving history.

However, ultimately Tam can't take apart the immerser on her own because, as Agnes reflects it:

takes a Galactic to believe that you can take a whole culture and reduce it to algorithms [and] for these girls, things are so much more complex than this; and they will never understand how an immerser works, because they can't think like a Galactic, they'll never ever think like that. You can't think like a Galactic unless you've been born in the culture. Or drugged yourself, senseless, into it, year after year....(de Bodard, "Immersion")

In Trinh T. Minh-ha's "Not You/Like You: Post-Colonial Women and the Interlocking Questions of Identity and Difference" Trinh thinks about the binary between the "I" and "not-I". She states, "what the outsider expects from the insider is, in fact, a projection of an all-knowing subject that this outsider usually attributes to himself and to his own kind. In this unacknowledged self/other relation, however, the other would always remain the shadow of the self" (Trinh). However, from these two "I's" emerges a knowledge of the outsider and the insider in oneself, where to see yourself the way the colonizer sees you and to see yourself as another you, develops a knowledge that runs counter to certain racializing structures. Where the immerser discourages subjects from thinking about multiple "I's" or dualisms through the way it decontextualizes cultural forms and reads race as violently immaterial, individuals racialized as small, foreign, and female have an awareness of these multiple dualisms always at play. Agnes more than Tam, possesses a knowledge that she has now recognized in herself, that she can understand how the immerser works because she has existed as an outsider and insider, forced

into assimilating to the cultural violence and forgetting demanded of her to exist in the Galactic Empire. The ways in which she is situated within Galactic categories of the human, gives her a new agency where she now realizes she can understand the Galactic mentality better than the Galactics themselves. This realization finally allows her to move her own body again and as she raises a hand and speaks, she is finally able to state to her sisters on Longevity trying to disconnect the immerser's circuits, "I know about this...let me help you, younger sisters" (de Bodard, "Immersion").

For Tam, the deconstruction of the immerser means taking apart Galactic tech and breaking a cultural hegemony, reinforced by the space of intimate relationships and tourism, to imagine possibilities for a new history that seeks to imagine and build a new reality. In the same way, "The Waiting Stars" utilizes the character Cuc to reprogram the Minds onboard the abandoned ships in space, being used to provide invisible labor on Prime. Both characters demand alternate forms of subjectivity in relationship to the physical body, by insisting on a version of the posthuman that is attuned to what has been forgotten in the process of technological development.

Conclusion

By acknowledging the categories of human and nonhuman that are anchored to physical forms, as they are grounded to the historical weight that the body remembers, de Bodard's short stories of the Galactic Empire pushes up against any notion of the posthuman that defaults to whiteness. The category of the Asian female body operates as an analytic through "The Waiting Stars" and "Immersion," that witnesses the intersections of militarism, labor, and technology as it tries to normalize cultural understandings of race and gender as ahistorical. However, like the

transformation of Agnes and Katherine, these registers of identity formation can become a site of possibility and resistance that inform a material engagement with narratives of high-tech futurity.

Returning to Zauner's "Machinist" video then, I'm interested in the ways in which Asian women's bodies are formed by techno-orientalist imagery and imaginations of posthumanism, but also not determined by them. Particularly the ways in which small, foreign, and female as a racialized and gendered category carries with it historical knowledges of how that form of embodiment has come to be and the new subject positions and agency that emerges out of it. In her video, Zauner isn't represented as a robot herself, equated as technology, but rather becomes the one who is trying to give her lover a robot form. In this way, she disrupts the image of Asian women as futuristically oversexualized and high-tech. However, "Machinist" is less interested in claiming human form for Zauner's performed character and more interested in blurring the boundaries and limitations of embodiment itself. Zauner understands that simply shifting between forms doesn't guarantee intimacy or for one to structure their feelings under liberal registers of personhood outside of the ways in which intimacy is wrapped up in power. The failure of the robot to manifest is less a failure and more an opening that allows for one to think about the boundaries of the human and nonhuman and the ways in which Asian American racial form is experienced across time.

CHAPTER THREE

Beyond Progress and Evaluation: Speculating on Apple's Supplier Responsibility Progress

Report and Envisioning Parallel Lives in Lisa Ko's The Leavers

On February 14, 2021, the CEO of Apple Inc., Tim Cook, tweeted about a Covid related surge in anti-Asian violence stating that:

The rising violence against the Asian community is a painful & urgent reminder that we must unite against racism in all its forms. There is no place for hate in our society. The team at Apple stands together & we will be donating to groups providing support to those affected. (Cook)

The language regarding hate having no place in our society, trends along the same lines as various public statements, with some of the biggest messages and anti-hate campaigns originating from the largest high-tech corporations. These messages around racial justice movements, such as #BLM in the wake of the murder of George Floyd and Breonna Taylor and #StopAsianHate after a rise in COVID hate crimes and the Atlanta spa shootings, have become the standard of what is expected from multinational tech companies and a way for the public to hold corporations accountable and demand them to think about antiracism.

For example, a portion of Apple's website reports on and discusses Inclusion and Diversity, understood in terms of Apple's "commitment to making our company more inclusive and the world more just. Where every great idea can be heard. And everybody belongs" (Apple Inc. *Inclusion & Diversity*). A web page that displays images and features on various people of color and women throughout the organization highlights the increasing number of employees from underrepresented communities defined as groups "whose representation in tech has been

historically low — Female, Black, Hispanic/Latinx, Multiracial, and Indigenous people” (Apple Inc. *Inclusion & Diversity*). The Inclusion and Diversity page frames their progress towards a more inclusive organization in terms of the demographics of their employees and their creation of tools that bring tech equity to all, as well as better forms of representation. The page highlights the affinity groups in the organizations, Apple’s partnerships with various HBCUs and nonprofits, antiracism trainings, and inclusive design practices to create products that are reflective of diverse groups of people.

However, the creation of content to manage how diversity and structural racism is discussed exists alongside the materiality of Apple’s supply chain. The focus of this chapter thinks specifically about how Asian women are made hypervisible in documents that portray Apple’s “progress” toward a more ethical supply chain through a narrative that grants them visibility strictly in registers of liberal personhood, while also simultaneously rendering them invisible in other discussions of diversity and inclusion. I focus my first close reading on Apple’s annual Supplier Responsibility Progress Report, internally produced each year to outline the “progress” the corporation has made toward improving the rights of the people that work in the supply chain and the environment impacted. The document highlights Apples’ programs created to improve access to educational opportunities and health programs for women, the various data collected that demonstrate progress and rate their efforts at sustainability, and their policies for guaranteeing the rights of workers. I read this document through a speculative framework, arguing that the progress report equates the future with evaluation metrics that seek to make more transparent the conditions of the factory. This narrative of transparency works to not only maintain a narrative of accountability through selective forms of hypervisibility but also establishes a narrative that erases the past, obfuscates the present, and strictly defines the future

to see people, particularly Asian women's bodies in the factory solely through registers of the human/nonhuman. The report makes Apple the corporate agents of liberal personhood and development, turning the exploitative conditions of the factory, the declining health of its workers, and the destruction of the environment into issues of individual concern that can be resolved through individual agency. However, the types of rights, education, and opportunities Apple claims to provide for women, when read alongside the conclusion of Lisa Ko's *The Leavers*, forces the reader to contend with the ways in which women's lives are not necessarily brought into the future by neoliberalism but rather further disavowed by it.

Lisa Ko was inspired to write *The Leavers* from a 2009 *New York Times* article about an undocumented immigrant from Fuzhou who was arrested at a bus station in Florida, on her way to a new job. The woman spent a year and a half in a detention center where she was separated from her young son. This is the premise from which the novel begins, centering the story on Polly, an undocumented Chinese immigrant, and her son Deming, living together in the Bronx. Together they live with Polly's partner Leon and his extended family while Polly goes to her job at a nail salon each day. One day Polly goes missing and no one knows where to locate her. With Vivian, Leon's sister, unable to care for Deming, she releases him into foster care where he ends up being adopted by a white couple who are professors in a small, college town upstate. Deming moves to the town of Ridgeborough and is suddenly sprung into a suburban community, becoming Daniel Wilkinson, immediately confronted with a new reality of assimilation. The first part of the novel follows Daniel through his upbringing and his self-exploration as he eventually leaves college and moves back to New York City. The novel then transitions into the perspective of Polly, who tells her story of moving from rural China to Fuzhou, to New York City, narrating her immigration and the challenging choices and forces that have guided her life.

The question, “what happened to Polly?” guides the novel’s narrative plot as Deming tries to answer the question of his mother’s disappearance. It is discovered that Polly spent a year and a half in detention—not far from where they lived in the Bronx—erased, suspended in time, and unable to find her son. However, I argue that the question that guides the book, “what happened to Polly?” is itself a speculative one rather than one that elicits a straightforward response. This is further supported by the foundation of the novel, Ko’s imagining of a larger world built out from an article that revealed very little about the circumstances and worlds the estrangement between the mother and son occurred within. Rather than reading the story as a reveal that guides the reader to the detention center, I argue that as Deming tries to locate Polly and account for her life, the novel reveals how various actors understand what happened to Polly differs based on how they understand temporality and progress, based on the degree with which they benefit from her invisibility. Deming’s adopted family chooses not to answer the question of “what happened to Polly?” and by violently assimilating Deming, using the narrative of Asian American liberal inclusion in relation to their position as adoptive parents, they make Polly’s precarious position as an Asian, immigrant, woman illegible. It is through disavowal that Polly is pushed to the margins, made invisible, and detained not only in her position as an immigrant in the United States but in her vulnerability as a woman of color in the global factory.

The switch in the novel that changes to Polly’s perspective, further troubles the impulse to directly answer the question by insisting on an account of Polly’s life that recounts her life as being intertwined with global capitalism that depends on a racialized, gendered workforce. Reading her story in the novel becomes a phenomenological account of how she experiences life within these systems, revealing the structures she is forced to move between and the choices and affordances she creates for herself as she navigates different spaces and hegemonies—only then

when Deming learns how Polly experiences time and movement outside of liberal progress, can he begin to answer the question of what happened to his mother. It is through a reading of the novel's central question as speculative that we can trouble the totalizing formation of small, foreign, and female in Apple's Supplier Responsibility Progress Report as being one strictly related to questions of quantitative accountability, development, and liberal personhood. The intimacies between Polly and Deming, make apparent the connections between the racializing and gendering structures of the local and the global—offering new ways for thinking about how racial capitalism operates outside of progress. The temporality here of small, foreign, and female is a collusion of time and space where recognizing the conditions of the global factory, repeatedly, across time, in different spaces, forms knowledge of liberalism's broken promise that depends on the exploitation of this racial formation. By reading these two texts together through the framework of the speculative, that which is made invisible of Asian American racial form in the figure of the small, foreign, and female—unaccounted for in terms of multiculturalism or developmental progress—begins to reappear. This reemergence doesn't seek to be included in time as progress or seek a point of complete resolution, but rather opens temporality to expand other notions of what it means to move through time.

The Speculative Temporality of Small, Foreign, and Female

I situate the linear narration of technology as progress first through a framework of temporal disavowal that disciplines genres of the human and nonhuman. In *Intimacies of Four Continents*, Lisa Lowe thinks about the way genres of the human are produced from the “economy of affirmation and forgetting that structures and formalizes the archives of liberalism” (*The Intimacies of Four Continents* 2). Specifically, the ways in which this kind of forgetting

facilitates degrees of distance from the category of “the human,” Lowe states that “the uses of universalizing concepts of reason, civilization, and freedom effect colonial divisions of humanity, affirming liberty for modern man while subordinating the various colonized and dispossessed peoples whose material labor and resources were the conditions of possibility for that liberty” (*The Intimacies of Four Continents* 6). This creation of the human, like Apple’s report that renders Asian women working in the supply chain representable through opportunity and employees of color visible through diversity and equity, creates markers of difference that grants “rights” and “liberty” to some while continuing to exploit others. Grace Hong thinks about this affirmation and forgetting in *Death Beyond Disavowal* as being a construct of neoliberalism that operates as an “epistemological structure of disavowal, a means of claiming that racial and gendered violences are things of the past” (7). Under this disavowal, putting forth certain bodies as worthy of rights and life exists alongside formations that rather than alleviate, depend on the political economy that relegate some to premature death where “the racialized and colonized poor are rendered vulnerable so as to produce them as a form of surplus labor, and are also imagined as backward, homophobic, and patriarchal as a means of rendering them as morally bankrupt and excluded from a privileged liberal personhood” (Hong, *Death Beyond Disavowal* 13). The affirmation of life and death (human/nonhuman) and what Apple’s Progress Report states are each person’s guaranteed “rights and responsibilities” (free/unfree) are tied together through temporality where temporal progress always positions racialized bodies as outside of liberal time.

In Partha Chatterjee's reading of Benedict Anderson's imagined communities, taking up Walter Benjamin's understanding of homogenous empty time, he critiques this notion of time by thinking of the ways in which capital doesn't account for alternate temporalities. Anything

encountered as outside of time or modernity are understood to have been from the past, any time capital encounters resistance.³⁹ Furthermore this notion of time allows a particular version of technological progress that sees high-tech innovation or new Apple products for example as propelling one into the future of new time. Under this version of temporality, Asian bodies are never fully accounted for as being of the moment. The bodies of Asian women, assembled as small, foreign, and female under technology's political economy, are simultaneously rendered as vulnerable and therefore exploitable, placing them in the past and only able to be brought forward through an impossible language of equality that places corporations like Apple at the center of guaranteeing that progress. The nonhuman formation of small, foreign, and female simultaneously also places Asian bodies as being part of a mechanized future, equating bodies with tools that assemble the technology and are seen as more conducive to the labor for the way they are narrated as technology themselves. Under this version of time, liberalism's demand for the complete visibility of Asian women's bodies can never orient the phenomenological experiences of Asian women as being in any given present—making invisible alternate accounts of racial and gendered violence for Asian bodies. Particularly in *The Leavers*, Deming and Polly are only ever able to be seen through liberal registers of providing opportunities for women in the developing world, masking the ways in which Polly's deportation and the everyday violence she faces is a result of liberalism's failed promise.

How do we then begin to think about the temporality and visibility of small, foreign, female? How does speculation create new openings for Asian women's bodies to be read outside

³⁹ See Chatterjee, Partha. "The Nation in Heterogeneous Time." *The Indian Economic & Social History Review*, vol. 38, no. 4, Dec. 2001, pp. 399–418.

of premodern/modern, human/nonhuman, and free/unfree by thinking about other orientations to temporality? I apply a speculative framework around progress, destabilizing Apple's Progress Report to think about the ways in which its truths are speculatively constructed through registers of liberal humanism in its use of evaluation metrics to justify the supply chain and push forth women's issues as being central to the future. By troubling progress and the future as speculative, the ways in which it is created and not yet formed provides openings to destabilize its purported inevitability. As Aimee Bahng states in *Migrant Futures*, rather than science fiction, speculation refers to "the various modalities of writing and reading that can alter relations between writer and reader, shift ways of thinking, and produce different kinds of subjects" (13). When enacted in this sense, speculation is less a genre and more an epistemological reading practice that has the capacity to destabilize certain hegemonic truths and materialize other forms of subjugated knowledge not often recognized. By questioning how material presents get made from what were once speculative futures, we can think further about how the small, foreign, and female is positioned for capitalist gain and how we can open temporality to think about progress in alternate terms.

For example, consider the following passage from *The Leavers* where Polly reflects on her body in the present, in relation to the life that she remembers:

And I was different, too, though I lived in the same body that had once slept with Haifeng, been packed into a box, delivered a baby, craved Leon so much its hands shook. A body changed in increments, and while this shifting seemed slow, it was unstoppable. The flesh got weightier, the skin coarser. Hairs in place they hadn't been before. But it was the same body, even if there was no visible sign of its

past. Like muscle memory, a body could recall things on a hidden, cellular level.
(Ko 207)

Polly's body is one that moves across borders in containers, exploited for her labor under registers of racialization and gendering that restrict her body. Yet, hers is a body that simultaneously has agency and its own wants for intimacy, motherhood, and movement. Her body containing all these simultaneous desires and constraints is the one that moves throughout time in the way it changes in increments. Time here may seem to operate linearly in the way it causes the body to appear older, but this growth isn't necessarily one toward someone completely different—Polly experiences these shifts and contains these memories and selves simultaneously all at the same time.

In *Unsettled: Cambodian Refugees in the New York City Hyperghetto*, Eric Tang argues that an alternate orientation to time for Cambodian refugees, emerges out of a long history of displacement and captivity where the status of the refugee, rather than being temporary, is one that persists where refuge is never found. Tang puts forth refugee temporality to think about the institutions and spaces where the refugee is “held in perpetual captivity so that she can be used over and over again” (14) where time isn't about “moments of transition and transfiguration but as one long and unbroken state of captivity” (15). I extend this engagement with time to think about the temporality of small, foreign, and female. As Polly experiences the shifts in selves and remembers what has and continues to happen to her across time, as she ages and moves through space, the promise of liberal equality and freedom is never realized. However, her knowledge of how she has experienced racialized and gendered embodiment across different spaces shifts the way she comes to think about temporality and the agency she finds for herself. In this sense, agency doesn't emerge as an endpoint through liberal promises of personhood or equality, but

rather from the choices created in the wake of everyday violence—the act of moving through life and the creation of and carrying of multiple selves as one navigates systems determined to make one invisible.

“Progress” and Evaluation in Apple’s Supplier Responsibility Progress Report

The introduction to the Supplier Responsibility Report begins with a heading that proclaims Apple’s “commitment to people and the planet” (Apple Inc. *Progress Report 2*), organizing the report into three sections—people, planet, and progress. Central to the language throughout the entire report is Apple’s commitment to treating people with “dignity and respect” (Apple Inc. *Progress Report 2*), words that get reiterated throughout to make central the ways in which workers rights are respected and their well-being looked out for. These principles of dignity, respect, and well-being are the foundation from which the report introduces their programs that create “advancement opportunities” (Apple Inc. *Progress Report 2*) to factory workers by providing educational opportunities for advancement and implementing other programs to bring more sound practices to people in the supply chain and the environment impacted. These programs and principles are all “fundamental to how an Apple product is made” (Apple Inc. *Progress Report 2*), rather than the raw materials⁴⁰ and export-oriented trade policies

⁴⁰ Not only are the raw materials responsible for Apple’s global environmental impact a problem, a lot of the waste in countries like the United Kingdom from unused and old electronics are dumped overseas. Retailers are legally responsible for this waste yet an estimated 40% is sent abroad, often illegally. See Laville, Sandra. “Amazon and Apple 'Not Playing Their Part' in Tackling Electronic Waste.” *The Guardian*, Guardian News and Media, 26 Nov. 2020,

that have allowed Apple to exploit and take advantage of a global, feminized, underpaid workforce primarily in China and Taiwan.⁴¹ The conditions from which Apple has fueled and developed a model for transnational labor and resource extraction is replaced by a narrative that centers dignity and respect, where it's the rights of people that are central to how products are made rather than the exploitation of that same workforce. Dignity and respect are defined in terms of Apple's Code of Conduct, based on "internationally recognized human rights, as set out in the United Nations' International Bill of Human Rights and the International Labour Organizations' Declaration on Fundamental Principles and Rights at Work" (Apple Inc. *Supplier Code of Conduct*).

The Code of Conduct acts as Apple's constitution that outlines the correct standards and rights guaranteed in business operations under the categories of Labor and Human Rights, Health and Safety, Environment, Ethics, and Management Systems. It is these declarations that are the metrics through which the corporation bases its numerical evaluation system and seeks to "advance the lives of the People in [their] supply chain" (Apple Inc. *Progress Report 3*) by training 3 million employees on their rights according to the code. The claim of liberalism is produced throughout the document first by a notion of human rights that separates Apple from the people that create their products. The supply chain is something that is part of Apple, but Apple's role in relation to the supply chain is to "drive progress with suppliers" (Apple Inc.

www.theguardian.com/technology/2020/nov/26/amazon-and-apple-not-playing-their-part-in-tackling-electronic-waste.

⁴¹ See Apple Inc. *Apple Supplier List Fiscal Year 2020*. Apple Inc, 2021, www.apple.com/supplier-responsibility/pdf/Apple-Supplier-List.pdf.

Progress Report 2) partnering with them to offer programs that benefit people. The report removes Apple, making them invisible in the way they frame and introduce their environmental impact and relationship to people. Additionally, progress is defined strictly in terms of evaluation where conducting “assessments to ensure suppliers are meeting our high standards” (Apple Inc. *Progress Report 2*) is the metric and goal to bring more and more suppliers into Apple’s numerical understandings of growth. These evaluations are meant to demonstrate how much progress suppliers make—where Apple seeks to make visible the conditions of improved exploitation through rankings and numerical data. The more suppliers are accounted for under this speculative form of curated visibility, the more Apple can narrate itself as a guarantor of liberal personhood.

Through metrics and evaluation, established through the Supplier Code of Conduct’s 500 data points that ranks suppliers as high, medium, or low performers, the working conditions of the factory are made invisible as they are turned into quantitative data. According to Apple, assessment is central to their accountability where it is claimed that in 2017, 756 assessments took place in 30 countries, covering 95% of the total annual supplier spend. These assessments are then translated to a 100-point scale based on the performance according to the Code of Conduct where 90 and above is “high,” 60 to 89 is “medium,” and below 59 is “low.” The assessments are bracketed in their numerical rankings by degrees of severity from lowest to highest being Administrative Non-Compliance (including inadequate record keeping and training on policy); Violations (including health checks and insufficient provision of benefits); and Core Violations (including underage workers, document falsification, environment, and safety threats). Furthermore, for some categories, these rankings are supplemented with awards for corporate labor and environmental transparency by other evaluation and ranking institutions that

further reinforce a certain speculative legitimacy. How does evaluation here translate into a severity which then becomes a data point which then becomes a numerical ranking? The assurance of a ranking that holds weight as marking some degree of assurance that human rights are being respected is fabricated and turned into a number through a grammar created by Apple itself. How data points become numbers is given no clarity and instead an audience reading the report sees numbers that become indisputable knowledge claims.

Furthermore, the Code of Conduct itself doesn't produce a ranking that holds Apple accountable, instead it becomes a ranking that shows an elevated bar that Apple is creating to bring factories closer to modernization and development. This curious task of creating a code upon which evaluators provide arbitrary numerical rankings to people and places, is a speculative one that when analyzed troubles the power of numerical scores and the rankings assigned to them. Evaluation in this sense is a constant moving target that never achieves its imagined aims and goals, but rather is constantly malleable based on the needs of Apple to define the parameters of its own degree of transparency and accountability. Thinking about evaluation through this speculative framework then provides more room to think about other types of knowledge that can speak against what is hegemonically constructed as Apple's dominating narrative of what happens in the factory.

For example, under the "Labor and Human Rights" category of the Code of Conduct, Apple gives themselves a score of 86 out of 100, which would place performance at a medium. Under this category the Supplier Responsibility Progress Report emphasizes the fabricated standards they have to ensure that employers are not underage or hired through debt-bonded labor, ensuring that Apple reviews identifications, audits documentation, and has a corrective plan in place to compensate individuals discovered with education, a safe return home, wages

paid, and/or a future employment guarantee. Apple states that the two incidents they did find of underage labor for example, were remediated, both cases stemming from “individuals [who] used false identification to gain employment” (Apple Inc. *Progress Report* 51). This purported visibility of underage labor performs a kind of accountability that uses a rating of 86 that is meant to stand as a form of transparency based on the Code of Conduct and a reveal of two incidents of underage labor that were quickly remediated properly. However, these two incidents were not only addressed but also blamed on the individuals who used false identification papers against Apple’s Code of Conduct, removing Apple again from the ways in which it has historically relied on this labor. This visible accountability showing numbers and disclosing small incidents of infraction act as a form of erasure. In an article in *The Atlantic* called, "Apple's Child-Labor Problem Runs Deep" the 2012 Supplier Responsibility Progress Report, which claims to have found no underage workers, is unpacked. One of Apple's largest suppliers Foxconn⁴² was found to be forcing parents to sign false papers for children who were employed underage. Amidst a report that highlights the company's zero-tolerance policy, the article outlines how the process goes unchecked where factories will often hide the evidence and Apple

⁴² One of many articles written about Foxconn in 2010 outlining the high suicide rates of Foxconn workers and its sweatshop conditions wrote that one executive stated that "there is a fine line between productivity and regimentation and inhumane treatment...I hope we treat our workers with dignity and respect." See Barboza, David. “Electronics Maker Promises Review after Suicides.” *The New York Times*, The New York Times, 26 May 2010, www.nytimes.com/2010/05/27/technology/27suicide.html.

relies on suppliers' child labor,⁴³ safely guarding itself behind the Code of Conduct. Apple repeatedly denies claims of its breaking of labor laws. For example, in 2019, CNBC reported that China Labor Watch found half of the workforce in the largest iPhone factory were temporary workers, where labor laws state that only 10% can make up the workforce. When Apple was asked, they denied claims and cited their Code of Conduct, stating workers were adequately compensated failing to mention the base wage of \$295 USD for long factory hours. Other claims in the report outlined the overtime hours, lack of protective equipment and occupational health and safety training, lack of reporting of injuries, and failure to pay bonuses.⁴⁴ The other insights of these articles into the Code of Conduct "Labor and Human Rights" category is mentioned here to highlight the ways in which Apple's reality is reinforced through its speculative construction of "dignity and respect" in how they temporally situate their own progress. While the report can claim to be safeguarding the rights of workers, working to show suppliers the way forward, it simultaneously creates environments that circumvent these codes and actively relies on the dehumanization of workers and their rights. By placing scores and measuring data from only the last fiscal year and narrating these findings strictly in terms of progress toward a better, more ethical supply chain, the Supplier Responsibility Progress Report also avoids any accountability

⁴³ See Greenfield, Rebecca. "Apple's Child-Labor Problem Runs Deep." *The Atlantic*, Atlantic Media Company, 30 Oct. 2013, www.theatlantic.com/technology/archive/2013/01/apples-child-labor-problem-runs-deep/319083/.

⁴⁴ See Choudhury, Saheli Roy. "Apple Denies Claims It Broke Chinese Labor Laws in iPhone Factory." *CNBC*, CNBC, 9 Sept. 2019, www.cnbc.com/2019/09/09/apple-appl-claims-it-broke-china-labor-laws-at-iphone-factory-mostly-false.html.

for its past. Neglecting to account for the numerous Free Trade Zone (FTZ) policies that have historically allowed for this, allows Apple to situate themselves outside of any materiality of their labor force.

In *Revolution at Point Zero*, Silva Federici discusses the new international division of labor of women working in FTZs. Federici writes that the FTZs are limited to a few areas such as South Korea, Hong Kong, Taiwan, and Mexico where development hides a hidden form of slavery in this transfer of capital and labor to the global south. FTZs provide certain benefits to transnational corporations where goods can be imported, completed, and returned without tax, duties, local discouragement of trade unions, and little regulation over health and safety. Orienting numbers that are representative of how they choose to depict their factories in the moment, progress being defined by more and more suppliers being evaluated, allows Apple to speculatively construct an idea of progress that places the corporation as the architects of a more sustainable future. “Dignity and respect” and the full rights of liberal personhood, secure Apple’s role as the guarantors of that freedom for its supply chain into the future, seeking to dominate other ways of thinking about the terms of that future and how and for who it is being produced.

Speculation in the Supplier Responsibility Progress Report operates to eliminate other ways of imagining otherwise, placing evaluations and metrics as an all-encompassing signifier of accountability and transparency. Responsibility becomes about ensuring temporal progress through visibility in its evaluation process, while simultaneously eliminating actual responsibility by creating a world of the supply chain, separate from Apple. The report then takes an interventionist approach to situating women as small, foreign, and female on its supply chain and in need of education that will bring them into the future.

Women's Rights as Apple's Rights

Central to a narrative that relies on an audience's expectations of numerical data to speculatively construct the conditions of its supply chain, is the report's use of images of Asian women and its narration of opportunities for these same women. Eleven of the sixteen images featuring people throughout the report are Asian women either in the factory or benefitting from Apple's employee programs in the classroom. The visibility of a feminized Asian workforce, rather than exposing Apple for the demographics of the people in its supply chain, again operates as a selective form of hypervisibility that silently works on the presumption that certain bodies are more suitable for this type of labor and can only be brought into the future through programs that seek to improve opportunities for women. In a strange paradox, Apple presents itself as the liberator for Asian women to move toward progress and the new high-tech economy, while simultaneously capitalizing on and investing in those same exploitative systems to produce their technology. The linear narrative toward futurity here obfuscates the cyclical nature of the exploitation of labor in the global economy. It is only through the aforementioned framework of speculation that we as an audience are able to undo the making of the Supplier Responsibility Progress Report and wonder about what other truths are simultaneously held true.

The cover of the report immediately shows an East Asian woman, working on the assembly line and framed by the blurred profiles of two men. She wears personal protective clothing, her face the only thing in the frame in clear focus. She doesn't stare directly into the camera as she looks up from her assembly line work but off into the distance with a slight, contented smile. Another East Asian woman is featured later in the report wearing similar garments with her gloves visible. She looks up from her work of assembly in a sterile, enclosed room, staring directly at the camera with a similar look of content. I wonder how these women

were chosen for these frames, what time of day it is—impossible to guess from the enclosed space of the factory floor, or how many hours they have worked. I wonder what their names are, their histories, how they were asked to pose for the camera at this moment, and what they resumed doing once the frame was captured. I think about how images like this register through an analytic of small, foreign, and female. How this hypervisibility reinforces the naturalness of these categories for Apple’s audience of the Supplier Responsibility Progress Report and the histories of looking at Asian women’s bodies through certain forms of visual violence.

This visibility is reinforced through sections of the “People” section of the report that outline Apple’s commitment to empowering women’s health education; environmental, health, and safety education; and other educational opportunities for advancement—all featuring images of Asian women in the Apple classroom. The task of empowering women through health education is framed in terms of providing women with tools to “take charge of their own health and well-being” (Apple Inc. *Progress Report 7*). The efforts of Apple in the last fiscal year have centered around health education in China and India intended to “enable women in factories to take charge of their personal health and well-being by becoming well-informed of risks specific to women” (Apple Inc. *Progress Report 7*) and by taking on leadership roles in sharing this knowledge with their community. According to Apple the curriculum centers around critical topics such as “self-examination for early cancer detection, nutrition, personal care, and maternal health” (Apple Inc. *Progress Report 7*) where training is tailored to the needs of factory employees. The peer-to-peer model outlined encourages leadership training for women to develop more confidence in their health and share their knowledge. This commitment to health education is reinforced by more numerical data points that show Apple’s goal of bringing health training to one million women by 2020 and the 4,000 participants who have already received

such training in 2017. A one-page spread following these program descriptions features a quote from a participant sharing how her learnings helped her mom know to visit her physician for a checkup, something she didn't do prior to the class. The spread features a photo of three Asian women linking hands and arms, walking outside together, smiling and conversing. The image is captioned "Women's health program participants in China" (Apple Inc. *Progress Report* 8). In contrast to the other images of women in the factory assembling the pieces of phones, the women are dressed in street clothing, outside of the factory. Women who have been represented in factory clothing previously, seen in some ways as nonhuman and mechanic through their proximity to technology, are now suggested to be liberated and granted access to a liberal genre of humanity through Apple's programs. Their eyes are all looking at an iPhone, their conversation presumably focusing on what is displayed on the screen that provides them new knowledge about health.

The language of "taking-charge" of one's own health and well-being runs through this discussion of women's health. Apple here centers themselves as liberators of bringing modern development to women who work on their assembly lines. This discussion of health as being a matter of an individual taking charge of their well-being and then developing the self-confidence to transmit this message out to other women in their families and communities, erases the corporation from the effect of their presence and the ways in which women's health is an issue bound up in the conditions of the factory. Issues like cancer detection and maternal health are understood as women's issues, rather than being a product of the toxic materials women encounter every day and the living conditions of the dorms. The shift becomes about taking charge and removing oneself from the cycle of poverty, a trope that depends on and reinforces a view of Asian women as needing saving from the conditions of their culture.

Not only are Apple programs what make this progress possible but implied is that it is technology itself, brought into the classroom, that empowers women specifically to be able to learn and take issues into their own hands. Access to technology works alongside an insistence throughout the report that global issues brought on by late capitalism are in fact strictly individual ones that can be resolved through women's education. The image of the three women staring at an iPhone to learn about health education is one of many that display Asian women in the factory using the same devices their labor is exploited to create. Here they use technology that grants them access to more opportunities, rather than being equated with technology or mechanization themselves. Another page shows a woman instructing a class in China through a vocational program offered by Apple, a MacBook featured prominently at the front of the classroom. Yet another image featured twice in the report is used first to accompany a spread that discusses supplementary educational content offerings, featuring five young women, with the caption "iPad Production Line Operators China" (Apple Inc. *Progress Report* 11). The image again shows women laughing and coming together around a classroom table, set up around an iPhone. These images are used alongside Apple's promotion of its educational offerings that provide opportunities for employees to advance their careers through education that they take into their own hands. These course offerings allow women to learn about how to be leaders on the assembly line, provide advancement opportunities for getting a degree in their free time, and interestingly teach women how to manage their own workplace safety by learning the proper ways to care for the environment and clean up their cities and factories through in-depth knowledge about safety on the supply chain.

All these educational offerings, aimed at women, turn global issues of labor, human rights, and environmental pollution, exploited by Apple, into problems that women specifically

can overcome if they can simply take charge of their own education. According to the report, this taking charge can only be facilitated through Apple's products that are democratizing access to education globally, even for workers who can't be consumers of the products they create. Asian women's bodies are hypervisible throughout the report, either in proximity to the assembly line making Apple products or using Apple products in relation to the ways they are allowed to advance. This visibility demands that Asian woman be racialized to be seen as more suited for this type of labor while also depending on the vulnerable intersections that these same women exist at. While capitalizing on this dehumanizing structure, the report simultaneously makes Asian women visible again as subjects moving toward being "modern" women if they can improve their status by making the most of Apple's programs and products.

Returning to Apple's statements on anti-Asian violence after analyzing the ways in which Apple represents its own supply chain, diversity, equity, and inclusion that strictly focuses on representation enfolds the radical language of antiracism within its structures to destabilize it, making it more difficult to radically critique the global issues of the supply chain. The way Asian women are placed within this framework—as model minorities whose intersecting identities are not underrepresented in the diversity and equity sense, reflect the contrasting visibility of what gets considered a matter of equity and inclusion versus what gets counted as a larger issue of human dignity and respect. It is through the hyper visibility of Asian women in both spaces that the boundaries of the local and the global are blurred and multicultural representation is disrupted. Unpacking the report as a form of speculation rather than a conclusive document, gives readers the opportunity to speculate on other ways of knowing the women that are made invisible throughout the report.

Assimilation and Liberal Antiracism in *The Leavers*

While the Progress Report seeks to eliminate possibilities for speculation, Lisa Ko's novel *The Leavers* uses speculation to trouble the notion of complete visibility under linear temporality. It tells the story of Polly and her son Deming as they move through global spaces and institutions to challenge what is expected from complete visibility, suggesting that what we can know about someone's life can never be fully accessible or fully known. As aforementioned, turning the question of "what happened to Polly?" in *The Leavers* into a speculative one and seeing it as the guiding structure of the intersecting entanglements of the novel, allows for Polly to not be a static self, easily locatable in one frame of understanding. The question begins to trouble the concreteness of liberal time, such as that posited forth in Apple's Progress Report, by following the different characters' accounts of how they answer that question through various racializing and gendering structures. When reading the two documents together, the limitations of measuring time in terms of progress becomes more apparent. *The Leavers* challenges notions of liberal visibility in terms of multiculturalism or development through the notion of split selves and lives that the system fails to contain. These breaks and the moments where Polly and Deming must narrate their bodies in terms of parallel lives, reveals what can't be accounted for by progress that sees technology and the consumption of new gadgets as propelling one through empty time. It is through Deming's experiences as an adoptee, the invisibility of Polly in detention, and her own split selves across global spaces that we can contend with the ways in which the embodied experience of small, foreign, and female speculates on and fails to be disciplined by the temporality of the Progress Report.

After Polly disappears, Deming enters foster care where he gets placed in temporary custody with Peter and Kay Wilkinson in Ridgeborough. When Deming first attends school, he

describes his experience as like being “imported from another planet to come to Planet Ridgeborough” (Ko 59) where all eyes are immediately on him, becoming instantly “too visible and invisible at the same time” (Ko 59). He sees this time on Planet Ridgeborough as being a temporary test, where fulfilling his mission would reunite him with his family in the Bronx. This experience of being completely foreign leaves Deming only with the ability to express his experience as interplanetary, revealing the estrangement felt when Deming gets dropped into a white, liberal space that racializes him as other—getting asked consistently “where are you from.” Deming’s response suggesting that he is from another planet, demonstrates the new racializing gaze he is subject to and the explanation that will protect his identity as he holds on to the prospect of reuniting with his family if he passes this test. Deming’s experience in Ridgeborough reveals the various mechanisms through which he is immediately expected to assimilate, in ways he hadn’t fully experienced under his mother’s care.

Upon his arrival he becomes Daniel Wilkinson because Kay and Peter decide that starting school would be “easier with an American name” (Ko 49). Despite speaking English fluently, Deming responds in Fuzhounese to the strangers who are now his adoptive parents. In response to his language, Deming is demanded to speak English justified by Peter who states he is “concerned that Deming wouldn’t be fluent enough for school, as if the English he spoke was tainted” (Ko 49). These initial scenes are followed by other objects forced onto Deming such as proper clothes, toys, and books that the Wilkinsons make accessible for him to consume and become a consumer of. One of these toys is a police car with miniature sirens, where for Deming “playing cops didn’t interest him. There was nothing fun about screeching sirens” (Ko 50). Deming’s assimilation is demanded as he becomes an alien, racialized as other and made foreign at school, where the impossible promise of inclusion is only reached by changing his name and

language, as well as literally interpellating into an ideological identity that centers the normalizing of patriarchal masculinity in terms of dress and everyday appearance of institutional police violence. The violence that his identity suddenly becomes intertwined with is at odds with Deming's own understanding of the systems that have intersected with his and his mother's life—and that are imprisoning her in a detention center at the same time as his visit to Planet Ridgeborough.

As Deming continues to navigate this world, the obsession with the adequacy of his English is continuously commented on by the Wilkinson's friends who have also adopted a Chinese daughter named Angel. This obsession with his language is coupled with an expectation that Deming should have access to his "culture" that his adoptive family should also learn more about it to understand him. His resistance to the institutions he is expected to assimilate to and the shock and trauma of the loss of his mother and being uprooted to a new environment gets read as silence that Peter questions as "maybe it's cultural, why he's more reserved?" (Ko 56). Cultural lessons and activities are frequently brought up as ways to connect adoptees, such as Deming and Angel, to their culture. A culture that is understood as activities like "the lion dance and the fan dance, all the different dances" (Ko 87) where "it's *so* good for the kids to connect to their culture. That way they'll still know how to be Chinese" (Ko 87). Culture in this sense gets dematerialized and Chinese-ness can be learned and connected to through dance. The Wilkinson's readings of cultural difference as being the key to understanding what it means for Deming to be Chinese or to explain his response to the circumstances of his mother's disappearance works as a form of erasure that disavows other ways of thinking about Deming and Polly's lives and experiences of being racialized and gendered in the varying spaces they have moved between.

Furthermore, Deming's insistence on pointing out racial violence gets consistently erased in a form of liberal gaslighting. In one excerpt Deming describes not feeling unhappy in Ridgeborough, while simultaneously remembering that he needed to stay alert to his environment and the strangers taking care of him. He describes a moment when a stereotypical Chinese character appears on a TV show, "a woman in a tight dress with garish eye makeup speaking a botched version of Mandarin, and Kay had stopped talking, the silence in the room was so loud it formed a dark red curtain, and Kay had flushed and quickly changed the channel" (74). Deming recollects how if that moment would have appeared on screen with Leon, his mother, or Vivian, they would have laughed at the caricature and impossibility of a woman getting a job and being in that scene. He continues to describe how once at the store he heard someone make a noise to him "like they did in kung-fu movies: *hi-ya!*" (Ko 74). Upon recollecting to Kay, she responds by asking "'maybe you misheard?'" (Ko 74). These two responses to the way Deming experiences forms of racism in a liberal multicultural world, are immediately met by Kay with avoidance or active erasure.

These official antiracisms masquerade as strategic, dematerialized admissions of what constitutes Asianness through culture. Jodi Melamed argues that these official "liberal antiracism [that] have both disconnected race from material conditions and linked antiracism to the expansion of U.S. led global capitalism (*Represent and Destroy* 10). Roderick Ferguson has similarly argued about official antiracisms in the university as a calculated difference where institutions "see minority difference and culture as positives that could be part of their own 'series of aims and objectives'" (6). These calculated, liberal differences validate certain forms of racial visibility and difference, while disavowing others that threaten neoliberal capitalism globally. The management of difference by the Wilkinsons as they put forth the correct liberal

ways for Deming to be Chinese in a white liberal university town, further removes Deming from being able to understand his mother's life, her disappearance unable to be accounted for as it is predicated on the types of management of racial and gendered difference upheld by the Wilkinsons. The Wilkinson's disavowal operates to further obfuscate Polly and her understanding of temporality, specifically through state institutions and the Wilkinsons' positionality within the university. The university, as Ferguson states, seeks to enfold difference for its own aims, deradicalizing an understanding of race and racial capitalism through particular modes of speaking about racial difference. For example, at one point when the Wilkinsons discuss ethnic studies on campus, they minimize its political value and frame it in terms of complaining students. This echoes a history of Ethnic Studies in the 1960s, formed from student strikes in the Bay Area that demanded space and courses to learn about their own history. Organizations like the Black Student Union demanded that the university reflect the ongoing struggles of their communities, providing a space for transformation. The Wilkinsons' position within the university and the official antiracisms they put forth, reference the ways in which what was once deeply political, gets made invisible through liberalism. Like the ways in which Apple enfolds racial difference through its management of diversity, equity, and inclusion—alongside its disavowal of its supply chain and the system of racial capitalism it is dependent upon—the Wilkinsons and their position within the university replicate this structure of making violence invisible.

However, the discomfort that the Wilkinsons feel in Deming's racialization—that perhaps leads to their active insistence on assimilating him—is more than uncomfortable, white, liberal avoidance. For Kay and Peter to address these moments of their own discomfort would require them to be accountable for and make visible the systems that have given them custody

over Deming and the reasons for Polly's disappearance. Throughout the novel, the Wilkinsons actively fear someone coming back for Deming and taking him back. Their roles as foster parents mean Polly's appearance and a deeper understanding of what happened to her, could remove their rights as Deming's parents. Because of this the Wilkinsons continue to participate in making Polly invisible through their justification for having Deming and their uncritical approach to the court systems that have given them guardianship. Peter and Kay throughout the novel never seek out Polly. Peter states, "this might sound callous, but honestly, whatever we do is going to be better than what he experienced before...we're the first stable home he's ever had" (Ko 76). Through a rationale of bringing a "better life" to Deming through notions of liberal progress and personhood, the Wilkinsons actively participate in Polly's absence, leaving her in the past and narrating her as an unsuitable parent.

Their narration occurs alongside the state administered adoption process that solidifies their claims to guardianship. In a moment where Deming realizes he might be adopted by his foster parents, he runs home to look online for definitions of foster child and adoptee, understanding the difference as making his temporary stay permanent. Before Kay and Peter get home, he goes through their cabinets that hold their documents to find his adoption folder. The first thing he sees in the folder is a pamphlet about adoption with "pictures of adults holding babies with darker skin. The children, the captions said, came from Ethiopia, Romania, and China. The pamphlet talked about how international adoption gave an unwanted child a home" (Ko 78). The rest of the folder contains the Wilkinson's medical, criminal clearance, and background check paperwork for adopting a child, officially making them legible as "well-established professionals who were financially and emotionally equipped to become loving parents" (Ko 79). Deming finally comes across a hearing report about his permanency status that

declares that the “birth mother and putative father abandoned child six months ago and returned to China...Foster parents plan to petition for termination of mother’s parental rights on grounds of abandonment” (Ko 79). In this moment of Deming’s self-realization of his new identity as an adoptee, he sees the ways in which the same narrative of progress and development that the Wilkinsons see him through, coalesces with the legal system that defines who and who cannot be a suitable parent. The Wilkinsons’ suitability as parents gets supported through the ways in which they are legible within state institutions and records where they are not only deemed “fit” but also are able to be legible because of the safety they have in being seen through these systems. Polly is understood through these documents as having abandoned her child, justifying the Wilkinsons grounds for terminating her rights as a mother.

However, the question of “what happened to Polly” is understood by the court system and the Wilkinsons as abandonment. Her disappearance is illegible because of the way she fails to map onto the systems safely the way the Wilkinsons can be made legible. This illegibility also removes recognition of Leon as Deming’s father figure, being seen as “putative” because of the ways in which Leon and Polly’s relationship isn’t recognized through marriage. Polly’s absence is read as abandonment because of the way undocumented immigrants forcibly placed in detention are rendered invisible. Her absence in the detention center takes away her legibility in liberal registers of personhood. It is through these petitions for adoption and court documents that Polly is actively made invisible, where Peter and Kay reinforce this invisibility by participating in an understanding of “bringing a better life” to Deming. The Wilkinsons’ uncomfortableness when Deming brings up his own feeling of being othered and their awkward insistence on dematerialized understandings of race as strictly cultural difference, reveal the ways in which they are refusing to contend with the systems they are actively benefiting from as

they try to create a normative family structure in white suburbia. For the Wilkinsons to engage with Deming's racialization in this way would mean they would have to begin to answer the question "what happened to Polly" by seeing racial violence. In this moment social death⁴⁵ and disavowal are operative as Polly disappears and the Wilkinsons' desire to be adoptive parents through their reliance on a court system to see them as more suitable parents, works on the same benevolence that is posited forth by Apple's Progress Report. This inscription of agency occurs through state legibility that removes any possibility for the kind of speculation that is back and forth, imagining something else in its place. Rather this form of state personhood operates as totalizing, providing set definitions of what is beneficial for whom without providing any room for other orientations to in this case, family structures.

Alongside the Wilkinsons' desire to assimilate Deming and their reliance on Chinese "culture" to represent race and then make it invisible, the justification for trying to assimilate the unassimilable Asian body into white institutions masks the violence that is happening simultaneously as Polly is in detention. Progress here, as in Apple's Progress Report, depends on the invisibility of Asian women's bodies as never being retrievable in the present moment to push forth a linear narrative of equality as American benevolence. Deming's discovery of the adoption pamphlet and the hearing report for the Wilkinsons' case, returns to the idea of a document like the Progress Report that purports to know the truth through complete visibility. Deming sees the report that purports to know the whole story, yet it is only through revisiting his

⁴⁵ See Cacho, Lisa M. *Social Death: Racialized Rightlessness and the Criminalization of the Unprotected*. New York University Press, 2012.

own memories and tracing his mother's many selves that he can see something outside of this progress narrative.

Racialized and Gendered Embodiment in the Temporality of the Global Factory

Part two of the novel shifts to Polly's first-person perspective as she addresses her story directly to her son. Responding again to the question of "what happened to Polly?" by centering Polly's own account, insists on complicating the question to think about how what happened to her is also about what happened to all the different selves that she has left, reinvented, and lived with across time. Rather than simply tracking Polly to a single location, Polly's own testimony explores what happened to her in the past and where she will go in the future through the ways in which she has moved through and experienced global space.

The beginning of the section starts with Polly's recollection of her early life, stating that "if you knew more about me, Deming, maybe you wouldn't blame me so much, maybe you would understand me more" (Ko 121). This personal account told to Deming, insists on a recollection of Polly's life that consistently intertwines her identity and choices within the systems that she has moved between. In contrast to the disavowal that is experienced by Deming in terms of the Wilkinsons being able to account for systemic violence, Polly's testimony insists on the complexities, intimacies, and agency that emerge from the violence of racial capitalism. Her story reads her life within these structures in a way that resists neoliberal notions of multicultural progress that might register her as backward or helpless, while still insisting on the violence of the forces that have led to some of the impossible choices she has had to make. Outside of placing small, foreign, and female in the past and in need of being brought into the

future, Polly's own account troubles the labor of Asian immigrant women by demanding visibility outside of progress.

Polly begins her story stating that in China she was once Peilan, born in Minjiang "a poor village in a poor province" (Ko 123) where her mother died from cancer at a young age. She recalls to Deming that he doesn't know what it's like to suffer yet still situates her family as always being able to eat well comparatively. From the beginning, Polly is placing herself in a time and place that are from the beginning tied to the social and economic status that she was able to move and make decisions from. As a teenager she learns "the city [Fuzhou] had stopped deporting rural migrants. Villagers couldn't get permanent urban hukou, but they could buy temporary resident permits and find better jobs than fishing and farming" (Ko 127). Hukou, a permanent residency status that determines benefits eligibility and other opportunities based on whether you were born in a rural or urban area, is something that Polly isn't born into, however factory work in Fuzhou is a mechanism through which she is able to migrate temporarily and make money as a woman. The increased feminization of the workforce in the urban factory in China in the early 1990s is a force behind Polly's first movement.

When arriving in Fuzhou she describes the conditions of the factory and the dorm where "my hands cramped, but I worked hard, even if it was so hot I felt like vegetables frying in a pan. Sweat dripped into the fabric, no time to wipe it off" (Ko 128), the foreman waiting to dock her pay, and the dormitories where "we slept sixteen to a room, two rows of eight bunks each" (Ko 128). However, these conditions occur alongside close friendships that form between women, where the women in the dormitory talk about their sexual experiences and new city lovers, spending their days off parading "down the street arm in arm, moving in sync like the world existed only to watch us" (Ko 129). The friendships that form are a moment where Polly is

introduced to pop songs about love where she learns her favorites are songs “about girls who’d been treated badly by boys but were now happy on their own” (Ko 130). Outlining the exploitative conditions of the factory, Polly’s testimony speaks against the Supplier Responsibility Progress Report in describing the conditions of the factory in a way that it seeks to make invisible. However, at the same time, the sense of financial and sexual independence she finds exists in this environment as well. In this sense, the joy she creates and finds for herself in female friendship and in her discovering what happiness on her own looks like, refuses to be intertwined with the happiness that advancement opportunities can provide for women in the “developing” world. Her experience in Fuzhou challenges a notion of temporality where women geographically positioned in the global south are relegated to the genre of the nonhuman and therefore no longer aligned with liberal progress. As Aihwa Ong has pointed out in her anthropological account of Malay women in global industrial factories, rereading Raymond Williams concept of emergence, she states that “in transnational corporations, we see that relations of domination and subordination, constituted in scientific terms, operate not only through the overt control of workers’ bodies but in the ways young female workers come to see themselves...they devise counter tactics for resisting images imposed on them and come to construct their own images” (4). Polly’s testimony of her movement from the rural to the urban challenges the temporality of Apple’s Progress Report in that it insists on the emergent, complex, shifting, modes of identity formation where women like Polly find forms of agency as they experience and learn to live within exploitative systems. Here, it’s not opportunity or migration that brings Polly opportunity and self-realization, it’s the way she and the women she works with create joy from this space, not because of their work in the factory, but in spite and alongside it.

When Polly later becomes pregnant with Deming and initially seeks an abortion, she is confronted with the question of what choices she can make when a system doesn't allow her to have agency over her own body. At a hospital in Fuzhou she is denied, due to not having the proper urban hukou. Back in her village with the correct rural hukou, she is denied again because she is only eighteen and “you can't get a marriage permit until you're nineteen and your boyfriend is twenty-one. And once you're married, you need to be twenty to get a birth permit” (Ko 133). Without the consent of the father, Polly can't receive the procedure and without the proper permits, going through with her pregnancy would include additional fines. These options weighed against her and her desire to remain free from marriage are what propel her out of the hospital and toward America. Hearing stories about America as being another world, an idea of the American dream as bringing with it progress and opportunity is sold to Polly. She sees this as a place where “it didn't matter if you had rural or urban hukou. They wouldn't care about things like pregnancy permits either” (Ko 137). Polly's migration to America, although propelled by the American dream, is an opportunity she takes to have agency over the way her body is being gendered in China and socioeconomically excluded from treatment due to her class. Mobility for Polly isn't configured in terms of the chance of advancement, but rather another choice presented to her to maintain her independence and be unmarried. The American dream here operates as a speculative force for Polly, despite not delivering on its promises, its image propels Polly as she seeks to continue creating space for herself to expand. She doesn't see it as being something that will bring her to a utopic idea of improvement or development but rather as a space for her to imagine something else.

However, when Polly arrives in America the comparisons she initially recalls of New York trouble the notion again of America being a space of opportunity and linear progress. She

didn't expect to "live in a shithole like the apartment on Rutgers Street" (Ko 139), working in a factory that "was packed and windowless, a quarter of the size of the room I'd worked in back at the Fuzhou factory" (Ko 147). Polly's labor is exploited in the factory, at home doing piecemeal orders of sewing at night, and later her work in a nail salon where she states the "nail polish fumes made me dizzy, made my nostrils burn and the skin on my fingers peel off in bright ribbons" (Ko 191), as she lives in fear of being deported and the ever-present fear of racial violence. Furthermore, the institution of marriage that she seeks to avoid becomes one of the only avenues of mobility for other Chinese women she meets. Polly recalls how a roommate tells her that "it was a waste to marry a person without papers...I imagined being without papers for the rest of my life, unable to drive or leave the country, stuck in the worst jobs. No different than staying in the village. I didn't want a small, resigned life, but I also craved certainty and safety" (Ko 191). Marriage carries with it the opportunity for a green card. However, when Polly falls in love with Leon, who is also undocumented, she knows that this road to citizenship will be closed off to her. Finally, Polly learns that an abortion is not possible for her when she arrives in New York upon visiting a doctor that tells her that an abortion for how far along she is in the pregnancy isn't possible because of the law. Like the ways in which Apple defines women's health issues as being problems of the individual rather than the collective responsibility of its own operations, Polly finds that her socioeconomic status within state institutions, continues to dictate her mobility and degree of choice, across global spaces. This in turn places the choices she can make as an individual on to her own lack of planning, rather than on the ways in which the state fails to think about women's health.

The blocks she came up against in China that exploited her labor, dictated the choices she could make about her pregnancy, and pushed her into marriage, are mapped onto the same

systems she comes across as a Chinese, immigrant, woman in the United States. Mobility that promises itself under the guise of America as a paradise, fails as Polly experiences being seen as small, foreign, and female, a vision that racializes and genders her body through the conditions of transnational global capitalism. As texts like Miriam Ching Yoon Louie's *Sweatshop Warriors: Immigrant Women Workers Take on the Global Factory* have pointed out the very notion of the global factory and the way immigrant women move between spaces, challenges the temporality of progress. Louie discusses the shifts in modernization of the Chinese economy in the 1990s and the shift toward manufacturing intensive industries in special economic zones. The circumstances where hundreds of thousands of young women migrate to the dangerous jobs in these zones, driven away from the countryside, share circumstances with a growing documented and undocumented workforce of low-wage women of color in the integrated global factories of Los Angeles, New York, and San Francisco where Asian and Latinx women comprise the majority of factory labor, keeping women of color in poverty across the global circuit.⁴⁶ Polly understands through her experiences that liberal temporality, in relation to the many captivities she has experienced, isn't operative and what she is seeking will not be resolved through liberalism or migration. The walls Polly runs into contradicts the temporality of the Supplier Responsibility Progress Report that fashions Apple as the liberator of Chinese women, bringing advancement opportunities to factories in China through American technology and education. As Polly narrates, her personal experiences and intersecting identities impact the degree of choice

⁴⁶ See Louie, Miriam Ching Yoon. *Sweatshop Warriors: Immigrant Women Workers Take on the Global Factory*. South End Press, 2001.

she has in different spaces, mutating or staying the same rather than propelling her into a speculative future of progress.

As Polly continues to be subject to global movements and the choices that she has varying degrees of agency within she speculatively creates different bodies she fashions for herself. When she learns that she must have Deming, she declares, “I had run out of choices; I was fucked. I had to have the baby. Or rather, *Polly* would have to have the baby” (Ko 142). A split occurs when Peilan becomes Polly upon coming to America and she is confronted with the new ways in which her body can move. She states, “it was Polly, not Peilan, who was doing thirteen-hour shifts in a garment factory, the same work Peilan had done in China except for eight times more money, and it was Polly who paid too much rent for a sleeping bag on the floor” (Ko 139). Polly describes New York throughout her narration as a “parallel gift of life” (Ko 142) revisiting what Peilan might have been doing in her village versus what choices and life Polly is living out in New York. The split selves and choices that give Polly many openings and potentials for the way her life could have unfolded, emphasize the limitations of agency as she moves globally in her social position. Speculation here operates as all these bodies and versions of herself that could have existed in different global spaces. The notion of separate selves comes up again when Polly talks about her time in detention, and the ways she would imagine herself and body when she was rendered invisible, relegated to an extreme social death. She protects and imagines herself as outside of her body stating, “I wasn’t really here. This was the life of another person I was watching in a movie” (Ko 299). Again, this speculative form of creating multiple bodies and lives for oneself as they are disavowed and relegated to social death, reveals how Polly produces her own way of surviving through self-narration and subject formation in spaces where that is taken from her.

As Grace Hong writes of those disavowed, the “very condition of vulnerability to death (their deathly existence) produce their own forms of meaning(lessness) and new definitions of (non)existence that expand our own narrow sense (*Death Beyond Disavowal* 16). Polly’s new form of embodiment, existing in multiple selves where some of those selves continue on in parallel to one temporal dimension while others cease to exist, produce alternatives to life that are strictly deemed worthy of protecting if seen as human and resists an idea of linear time that brings with it opportunity. Split selves and multiple Polly’s, offers new ways to think about life and death and the registers through what life is made visible and deemed worthy of protecting, particularly in terms of how Asian immigrant women move through global spaces and create new forms of life as they are made nonhuman. New lives and possibilities, as well as the reality of ongoing social death, challenges liberal temporality again in the way they suggest that there are many new beginnings, ends, and modes of experiencing life when relegated to the outskirts of the genres of human.

Intergenerational Temporality and Movement as Resistance

When Deming eventually travels to Fuzhou as an adult and hears Polly’s testimony of her time at the Ardsleyville detention center, it becomes clear that Polly’s experience of time and split selves is a knowledge that can get passed down to Deming. Initially, she has difficulty opening up to Deming because of the ongoing trauma she still experiences recollecting her time in detention. But the testimony of what her life was inside Ardsleyville is something that is important for her to pass on and as knowledge that comes to shape Deming. Polly’s first-person account of her experiences and interior life told to her son throughout the book suggests a certain intimacy that is transferred across generations. As aforementioned, Eric Tang’s concept of

refugee temporality is a distinct way in which past captivities are understood as continuing into the present, even when freedom is promised. Tang writes of the second and third generation of Cambodian refugees that while many were too young to have their own memories of war, “now claimed to be living through a war of their own” (8) in the hyperghetto. Refugee temporality as an epistemological and intergenerational knowledge, became a survival tool that generations were able to pass down to understand liberalism as disavowal and find other ways to resist in the face of violence. All the sections that focus on Polly’s life, take the format of a first-person account of her life told directly to her son revealing the way this intergenerational knowledge is shared and passed along. Deming learns that Polly was swept up in an immigration raid at the nail salon, where she then entered a detention center for 18 months, the majority spent in solitary confinement. Her direct testimony of the conditions of Ardsleyville reveals how time became blurred and she lost a sense of her surroundings, leading to the split selves that she created out of survival. As Deming continues to hear his mother’s story, her experiences across the integrated global circuit, her multiple selves, and the movements she made, he begins to understand that seeing his mother’s disappearance as abandonment, doesn’t give him clarity to the question of what happened to her. Deming can return to the moment where the court labeled his adoption as being “on grounds of abandonment” (Ko 79) and move outside of state-produced definitions of where to locate bodies that are granted full access to liberal institutions. He begins to learn that there is nothing that could be done to reunite them after her deportation when she states ““I didn’t forget. I just survived”” (Ko 309).

This new knowledge for Deming translates into how he begins to understand the gaze of the Wilkinsons and the ways in which he is forced to assimilate, leading him to begin to think about new ways to survive and make new life, like his mother. These realizations culminate in a

moment where Peter and Kay video call him while he is in Fuzhou staying with his mother and Polly talks to the Wilkinsons for the first time. Deming sees Kay and Peter registering his mother after they thank her for taking care of Daniel, he wasn't sure if she had "the English words to respond, or if she didn't know what to say, but he wanted her to say something, anything, for her to be as loud and demanding and opinionated as she usually was. He hated that he could see her the way Peter and Kay must be seeing her, a mute Chinese woman with a heavy accent" (Ko 320). This moment of various racial gazes—seeing the way that Kay and Peter racialize his mother as small, foreign, and female—angers Deming in the gaze that Polly is being trapped within. The same gaze that forced Deming to try and assimilate to white America by denouncing his name and language, constraining the way his body is racialized and gendered under liberal time. However rather than assimilate properly and perform the gratitude of an adoptee's mother, confirming the Wilkinsons' gaze, the first thing that Polly says is, "His name is Deming, not Daniel" (Ko 320). Reclaiming her son's name at this moment, releases Deming from an alternate life that he too had to exist in. Polly, well versed in what it means to change names and be made alien in white spaces, frees Deming from their gaze rather than their gaze confining her body in that moment. It is through her knowledge of the way her body has moved through different spaces that she is able to reclaim Deming and give him a new understanding of how his body has been disciplined and how he can move forward, continuing to make split selves as well through movement that doesn't necessarily propel one's body toward the broken promise of equality, but movement that survives, creates new opportunities, and insists on creating new definitions of life in systems designed to make certain lives invisible.

When Deming returns to New York and is picked up by the Wilkinsons, Kay remarks, "your father and I were reading an article about how women in China are still second-class

citizens. It makes sense, I suppose, with the cultural bias against girls'...'Polly, your birth mother? She must be very brave to have the kind of career she does" (Ko 332). Kay continues to state that much more could be done and suggests the idea of opening a scholarship for a female Chinese student at the college they work at. Having been reunited with himself as Deming and hearing his mother's testimony of her life and time in the detention center, Kay's understanding of Chinese women as needing benevolent aid, particularly handed out through the university as an institution, reads humorously. The attention to the ridiculousness of this claim and Kay's attempt to forcibly narrate Polly's life within her framework of American opportunity, also draws attention to the speculative construction of Apple's Progress Report. For Deming, deducing his mother's complex story unsettles him and the only way in which he knows how to respond is by stating, "'it's not really like that'" (Ko 332). In this moment he sees what has happened to him throughout his time in Ridgeborough where "he shivered, and for a brief, horrible, moment, he could see himself the way he realized they saw him—as someone who needed to be saved" (Ko 333). At this point in the novel after moving between global spaces—being racialized in through social, political, and economic frameworks—Deming can see himself and the system that has helped make his mother's disappearance possible. It is from this realization that Deming learns to trust his choices, dropping out of college and moving to the city to live with Michael, Vivian's son. Daniel's death leads to Deming's own splitting of selves, a parallel life that he learns from his mother's own sense of agency. In this new self, he separates from the model minority seeing himself in the third person outside of registers of liberal inclusion. Rather than never seeing the Wilkinsons again, he learns to live on and contain multiple selves and lives, developing an awareness for the society that has violently extracted from his mother.

Polly too leaves Fuzhou after Deming departs, migrating to Hong Kong and leaving her partner despite the social mobility that he could offer her. For both Deming and Polly, movement, or rather the identity of being a “leaver,” is a choice and an opportunity. Despite the ways in which their identities get defined for them, movement allows them to also have agency in how they choose to be seen outside of what gets narrated as progress. It is through movement that Polly and Deming become bonded, rather than an ending that concludes with reunification and living in the same home. Through Polly’s shared testimony and her insistence on returning Deming to himself, mother and son can understand and get to know each other again, after having been assimilated into an adoptive family and entering a detention center and being deported. Leaving and coming back and understanding the shifting formations of racial identity as they move globally, Polly and Deming must consistently become reacquainted with one another and create new definitions of home. To be racialized in these conflicting and at times aligning settings across time is to be constantly changed by the relation of one's body to the political economy and relegated to different forms of social death. However, Polly and Deming insist on coming together at different times to understand each other's testimonies through these shifting contexts.

Conclusion

Centering immigrant women across global spaces, challenges the notion of progress put forth by Apple’s Supplier Responsibility Progress Report. The construction of progress in the report makes visible Asian women in order to make invisible other forms of temporality through violent definitions of time, numerical evaluation, and liberal opportunity. By speculatively deconstructing documents like these and speculatively engaging with Asian American literature

in conversation, progress can be troubled as small, foreign, and female moves through different local and global spaces, revealing temporality as it relates to gendered and racialized embodiment.

In “Speculative Ageographies”, Tina Chen thinks about how the “structural incoherence of Global Asias as imaginable geography can result in an extraordinary opportunity to engage with and reflect on the intellectual contestation and institutional presuppositions producing the subjects, objects, and methodologies by which ‘Asia’ and its multiple diasporas are made legible” (47). Thinking about the choices and splits in Polly’s life as her experiences are structured by migration throughout China, immigration to the United States, and deportation back to China, expands the possibilities for this speculative ageography to think about geography not simply in terms of imagined spaces on a map, but in terms of the subjects moving and forced through institutions across borders that are imagined and made legible. Polly’s narration of split selves, when seen as speculative, gives Polly the opportunity to experience time and the many lives available to her simultaneously. It is from this knowledge and consistent refashioning of selves under the ways she is gendered and racialized across ageographies that she makes choices by changing jobs, moving cities, choosing romantic partners, and claiming motherhood, despite living under the gaze of racial capitalism—destabilizing the idea that full personhood can be reached by moving forward in time and being made more American. By continuing to think about the incoherence of Global Asias alongside alternate temporalities formed by immigrant women in the global factory, the genres of human/nonhuman, free/unfree, and premodern/modern posited forth in the Progress Report can continue to be destabilized—creating openings for alternate orientations to time.

CONCLUSION

At the moment I write this and reflect on the project as a whole, I can't help but think about the one-year anniversary of the March 16th Atlanta spa shootings. I'm also writing from my home in New York City where a recent surge in anti-Asian violence directed at Asian women living here, on the subway and in their own homes, has created a feeling of palpable unsafety throughout the city. As I think about these experiences of embodiment as one moves throughout the world, I can't help but continually turn to family photographs to fill some of the void. In the wake of the Atlanta spa shootings, I was struck by the quantity of photographs curated and produced that sought to represent Asian bodies on different terms, opening representation as a site of contestation and possibility. *The New York Times*, curating some of these images, published a piece called "Keeping Love Close: What does love look like in a time of hate? Asian and Asian-American photographers respond" that featured a series of photographers seeking to capture scenes of love and care in diasporic Asian families. Celeste Ng's corresponding piece framed the selection in terms of the ways in which worry in Asian families often leads to care. She describes the feeling of kinship she feels in relation to attacks on elderly Asians, the visceral pain felt from seeing someone who could be "someone's auntie or father or poh poh" (Ng). This worry and hypervisibility explored by Ng brings to surface the ways in which visibility creates fear and makes one vulnerable—being told to hide and assimilate to what it means to visibly register as American enough. She reflects:

A picture can't prove someone's humanity...we don't need our photos and stories to convince people we're human, that we're just like them. We don't need to be just like them, for that matter we don't need to match some narrow red-white-and-blue blur of what Americanness — or humanity — means. There is value in

choosing how to be seen, in reclaiming the right to select the face you show the world, in insisting that others see you as you know yourself to be. In proudly and boldly framing ourselves in the ways of our own choosing, to say: Here I am, this is me. (Ng)

Visibility here is intertwined with definitions of the human. It suggests that photographs that prove one's humanity through a framework that thinks about identity in terms of belonging and assimilation don't need to be produced for the gaze of others. But rather, the archive reproduced seeks to choose the terms of Asian identity production. The value Ng discusses in choosing how you want to be seen disrupts the visual violence produced in the wake of Atlanta, to protect and make visible scenes of love and care that exist alongside a climate of racial violence. However, outside of representation as a site of interrogation, family photographs also open speculative possibilities for repair, care, and alternative modes of kinship in scenes of Asian American domestic life, seeking to disrupt violent fields of racialized and gendered vision.

I began this project and my academic journey in graduate school with the desire to simultaneously trace and hold close my halmoni and her stories. Therefore, it only seems appropriate to conclude with her as well. As I'm looking through my own family photographs, I see two images in the archive and after looking at them closer, I realize they are from the same moment, taken from two angles. In the first photo (fig. 1) my halmoni sits on a mattress on the floor with her arm wrapped around my aunt Sona, holding on to her firmly—one hand on Sona's forearm and the other supporting her shoulder. I see my halmoni's face smiling at the camera, and a look of motherly love and care while Sona looks away, letting herself be taken care of by her mom. The photo makes me remember sitting on the floor on mattresses placed throughout the spaces where the women in our family would gather and exist with one another safely. I look

at the foreground of the photo after multiple glances and see a can of soda water and a napkin, on top of a green tablecloth. I look at (fig. 2) and see the same set up from an alternate angle.



Fig. 1



Fig. 2

My halmoni and aunt's legs propped up on the same table, covered with a green tablecloth, the soda water and napkin still visible, along with other items now made visible from the new angle. My aunt Sonny captured the first photo, so I asked her why this photo of Sona and halmoni's feet was taken. I learn that these photos were taken during a time when my halmoni knew she was dying. One of the biggest regrets my family recollects about this period when looking at these photos is that they couldn't fully recognize how sick halmoni was, despite knowing she was dying. Her pain and proximity to death were something that felt unavoidable to them, and the pain she was in was either minimized or not felt. Others who tried to treat her—the doctors visited, and healers called—also minimized her pain, telling her she was faking her illness. For me, the regret felt by mom and aunts at not being able to see something so visible demonstrates a tangible example of how seeing my halmoni's body as small, foreign, and female—her body only being made visible and understood as something laboring and nonhuman—was something that killed her silently. How these categories affected the way generations of women in my family can relate and see each other, creating fractures that have broken relationships. Sonny, explaining to me these feelings, says halmoni's sickness strikes her in this image of Sona and my halmoni's feet. She says that at this moment, Sona didn't realize how sick halmoni was. She noticed her pain when looking at their feet side by side, seeing the condition of my halmoni's legs and swollen feet, only after this image was developed. It was only after a camera captured this moment where members of my family were the sole photographers, subjects, and initial audience that a particular familial gaze allowed one to see and hold all at once my halmoni's body in that moment and the traumas of her life that came before, disrupting the logic of temporality by showing that not all things can always be seen or made visible. This retrospective gaze looks at her body in pain, makes visible the violent systems

in which she was caring, but wasn't being cared for. Her intimate labor was something that came at the expense of the way she cared for herself and the types of love she gave. However, sitting with this piece of ephemera, perhaps in its switching of focal points, which insists on the variability of perspective and memory, begets another form of care posthumously. In being able to see her pain, which wasn't made visible in the present, the non-linear temporality of visibility brings healing to the ways in which I am better able to care for my grandmother's life and the agency she created for herself.

It is with this same visibility that I look at other images in the private space of the home, where again my halmoni, my aunts, and my mom are the only photographers and subjects of other photos where they come together on the mattresses throughout the house. When looking at the function of the mattress in these spaces, I see my halmoni giving me a piggyback ride on her knees throughout the house (fig. 3), my mom looking up from a mattress and seeing our joy. On another mattress, I see my mom and Sonny huddled together (fig. 4), my aunt embracing my mom (after a night of drinking). In my mom's gaze staring at the camera, I see the same look of comfortable tenderness knowing you are being cared for. I see Sona laying on a mattress with me as a child (fig. 5), holding her arms around me the way my halmoni held her. We are huddled together on a mattress, in the same simple space of bare walls, minimal furniture, and scattered items throughout the room and space. In these relations, new orientations that queer the space of the patriarchal family are formed by the presence of a mattress that disrupts the normative logics of a family home. Rather than gathering around dinner tables, pointing toward hetero-normative familial relationships, new forms of relation and action are possible by the women in my family who gather on mattresses. Care between women in my family was often impossible because of how their intimate labor was exploitable and monetized. These images of proximity shared

through bodily orientations on these mattresses has a reparative function in how they reveal moments of possibility. In a climate of racial and gendered violence, where Asian women's bodies often do not have the space to ask for care or have the free time to care for themselves or loved ones, a simple embrace in these domestic spaces reveals how moments of joy can be seen so visibly alongside other violence, providing the opportunity to show how generations of familial love remain and did in fact exist.



Fig. 3



Fig. 4



Fig. 5

Viewing photographs in my own family’s archive reproduces a sort of connection felt when looking at familial images. A speculative imagining creates a feeling of kinship, connecting me to personal family archives to mediate some of those feelings. David Eng has tied photographs to loss, in the way that photographs can be rethought of not representing history as it really was, but in disrupting the past, “opening up a visual domain that is, at once, the social space of history and a history of the present” (339). Photographs bring together history and memory that can produce embodied forms of knowledge beyond historicism. I think about this critical feeling of photography, to explore the openings for the speculative possibilities of family photographs for alternate retrievals of kinship and care within the home. Beyond the emotional pull of family photos in the wake of Atlanta, beyond the things they make us feel, what possibilities emerge for rethinking and disrupting one’s own relationship to the categories of small, foreign, and female through the circulation and ephemerality of finding photos and the new stories we narrate alongside our holding of them?

As bell hooks states of photographs, the memories they bring evoke the:

coming together of severed parts, fragments becoming a whole. Photography has been, and is, central to that aspect of decolonization that calls us back to the past and offers a way to reclaim and renew life-affirming bonds. Using images, we connect ourselves to a recuperative, redemptive memory that enables us to construct radical identities, images of ourselves that transcend the limits of the colonizing eye. (64)

This suturing together of ephemeral fragmentations provides new ways to sit with racialized and gendered phenomenology, allowing for a kind of speculative looking. Speculative looking intergenerationally reminds us that knowledge is always being added, taken away, forgotten, and invented because of the politics of memory—retransforming these spaces into places where care exists across time. Tina Campt has employed this speculative mode of viewing family photographs as a kind of generative refusal that invokes other forms of black futurity through the speculative mode employed—consistently thinking about the boundaries of what can and can't be known through the act of sitting with what is accepted as truth and the affective dimension of photographs. For bodies in the diaspora, images behold possibilities not just for new forms of representation, but also for other forms of retrieval, care, and repair. Campt writes of the hapticity of viewing photographs in terms of contact and relationality, where the labor of feeling requires exertion in order to remain in relation, a love that isn't about empathy, but rather “the work of feeling precarious or feeling precarity in relation to differentially valued and devalued bodies in the absence of any guarantee of respite, respect, or recognition” (43). This labor allows for relationality in order to view and hold alongside the spectrum of black joy amidst racial trauma. This understanding of repair and restoration holds family photos and close reads for forms of retrievable intergenerational care that exist in a climate of racial violence. This

simultaneous holding, emerging out of a speculative refusal and respect for what can't be known, opens up categories such as small, foreign, and female—rejecting the idea of a knowable subject, and requiring labor that means constant renegotiation with memories, fantasies, narratives, and myths that circulate about the past to question the stability of subject formation, memory, and categories of racialization. For Asian women's bodies in family photographs, self-representation is a practice of survival that provides agency in deciding not only the terms of being seen, but also in the possibilities for restorative care intergenerationally.

My dissertation has traced the figure of small, foreign, and female to think about how this racial formation is produced and phenomenologically experienced by Asian women's bodily orientations across time. I've traced the ways in which small, foreign, and female moves throughout the world, to reveal the speculative visions of women of color in technology's political economy. Chapter one attends to the small, foreign, and female in its reading of hands within narratives of contamination, insisting on materiality in the cultural narratives of technology's political economy. Chapter two grapples with posthuman conceptions of Asian women's embodiment as small, foreign, and female to speculate on alternate kinship formations in the intergenerational relationship of Asian women, pointing to something outside of liberal humanism. Finally, chapter three examines the temporality of small, foreign, and female through liberalism's broken promise, reading this figure to create other ideas of what it means for one's body to move throughout time outside of technological progress.

I conclude with the act of sitting with photos as a speculative form of care that asks how we can create room for Asian women's bodies to exist expansively. To be small, foreign, and female means to be constrained by but not limited to the terms of representation externally placed on your body. However, in the ways in which the body is seen and allowed to move, what

new knowledge is formed and what possibilities for resistance and agency creatively emerge? Viewing family photographs is an example of how one might actively seek relationality, intimately engaging in a form of care that asks us to see and reimagine domestic spaces for their unexpected moments of resistance. Photographic moments that make visible the “everyday acts of care that pass quietly between people of color in the often-hostile environment of this country” (Chambers-Letson 149). Care visible in spaces safe for my emos, mom, and halmoni to explore their relationship to one another, exploring the expansiveness of their bodies in relation to one another.

To return to the Atlanta spa shootings, these representational practices of viewing Asian women make apparent the ways in which the victims of this kind of violence were killed through culminating racializing and gendering registers of vision. However, when opening the category of small, foreign, and female, to focus on the types of phenomenology and agency for Asian women, despite transnational registers of a global laboring circuit placed upon your body, a possibility emerges for speculative restoration that asks us to create ways for the body to outwardly expand with new forms of agency and care across time.

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