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Land, Family, Body:
Measurement and the Racial Politics of US Colonialism in Haudenosaunee Country

By

Meredith Alberta Palmer

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Geography

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Jake Kosek, Chair
Professor Michael J. Watts
Professor Beth Piatote
Professor Duana Fullwiley

Summer 2020

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Abstract

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Doctor of Philosophy in Geography

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This dissertation explores the racial politics of measurement in US colonialism in the portion of Haudenosaunee (Iroquois) homelands today territorialized as upstate New York. Since the last thirty years, Indigenous peoples who live in North America have been figured within health disparities research as a singular race of people, and specifically as a race suffering from greater rates of disease and premature death. This project traces the ways that metrics and measures of racial difference as a biologically-relevant attribute among Indigenous people have been a technique of power in US colonialism. Informed by archival research in four archives, personal interviews, critical review of scientific publications, analytical reflections on Native texts, and participant observation, I argue that these measures constitute figures of Indianness which naturalize colonial dispossession through the construction of Euroamerican reason and order. In a triptych of three chapters, I make the case that these colonial processes of subjectivation construct a "Indian" figure that is dismembered from land, from family, and from one's own body. First, I show how the units and technologies of land survey—developed and practiced in the late 1700s in post-Revolutionary United States in order to form heritable land-as-property—materialized anti-Indigenous concepts of self and place as the basis of Euroamerican settler governance. My second chapter analyzes how Thomas Indian School (1855-1957) administrators and other personnel produced a Euroamerican sense of order and "care" vis-à-vis discursive practices of health-making, as they surveilled Haudenosaunee childrens' mobilities, sexualities, and kinship relations in the US colonial project of dispossession by way of assimilation. Third, I show how mid-1900s racial blood serology research done in Haudenosaunee communities—aimed at defining Indianness through biogenetic measures—aligned with state development projects that enacted forms of termination and relocation by other means in upstate New York. Each chapter addresses how these colonial techniques of power shape the textures of Haudenosaunee lives and sovereignties as they are reckoned and refused. This dissertation suggests that the ethical demands of healing and wellbeing in Native communities extend beyond these racializing measured differences and colonial bureaucracies, to upend and refuse a range of discursive practices that mark Indigenous people as damaged.

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Acknowledgments

I want to begin by honoring the Chochenyo Ohlone, the peoples of Huichin, which is the land that many now known as Oakland, Albany, and Berkeley, California. There, within and outside the institution of UC Berkeley, I met an incredible network of scholars, activists, protectors, writers, and friends. To begin, I hold so much gratitude for the steadfast support of the four people that make up my dissertation committee. Jake Kosek and Michael Watts: you both opened your doors in the hallways of the Geography department and never closed them, even as my project veered away from the conventions of our department. Beth Piatote and Duana Fullwiley: you are my scholarly life and writing inspirations, and you both ground your luminous intellects in generosity and kindness that helped me see my work through. To my "shadow committee" member, Donald Moore: you were so patient with me as I grappled with disciplinary histories and boundaries. The opportunity to learn from each of you and to be your student has been humbling.

The rich graduate student community at UC Berkeley made my PhD experience exceptional. My thought partners and co-conspirators with whom I shared article drafts, fellowship applications, and dissertation chapters: Erin Torkelson, Andrea Marston, Camilla Hawthorne, Jen Rose Smith, Brittany Meché, Julia Sizek, Zahra Hayat, Ashton Wesner, Alex Werth, and John Elrick. Sharing early, messy work is a vulnerable process and I always felt safe with my ideas in your hands. I am thankful to the 'elder' graduate students who made Berkeley Geography a welcoming place in the early years: Ilaria Giglioli, Annie Shattuck, Greta Marchesi, Erin Collins, John Stehlin, Alex Tarr, Meleiza Figueroa, Zoe Friedman-Cohen, Elise Youn, Shannon Cram, Gustavo Oliveira, and Diana Negrín da Silva. Colleagues who inspired me in the ways they celebrated and tackled their various challenges of life in graduate school: Shu-Wei Tsai, Mollie Van Gordon, Alessandro Tiberio, Frances Roberts-Gregory, Jesse Rodenbiker, Ina Kelleher, and Olivia Young. Angela Aguilar, who was not only a graduate school colleague, but a gentle and loving radical doula who helped me bring my daughter into this world. To the many friends I have made outside of Geography or outside of Berkeley: Shelby Loft, Theresa Rocha Beardall, Lisa Kahaleole Hall, Susan Burch, Alicia Swords, and Jamiella Brooks. To the scholars and friends whose video-conference co-writing sessions saw this dissertation to its end: Ashley Smith, Laticia McNaughton, Jennifer Hamilton, Whitney Mauer, and Hayley Marama Cavino. What I have learned from all of you is invaluable: your boldness and dedication, the way you work and write, how you encourage and sustain.

The Native community at Berkeley was central source of support for my intellectual endeavors and my personal nurturance. Olivia Chilcote and Tasha Hauff, who passed on the mantle of the American Indian Graduate Student Association on to me; to Jen Rose Smith, who carried it with me; and to Fantasia Painter and Hector Callejas, who took it up when I left. Many thanks to Phenocia Bauerle, who was always there with an open and critical ear, keeping our small Native communities on campus together and informed. To Carmen Foghorn and Cindy Andallo, who organized the American Indian Graduate Student Program space and events. To Beth Piatote, again, who continues to

breathe life into Native Studies at Berkeley, which is no small feat of time, will, and heart. You all *saw* me at Berkeley when I felt imperceptible.

This dissertation has benefitted from the support of multiple fellowships, including the UC Chancellor's Fellowship, the Ford Foundation Predoctoral Fellowship, the Ford Foundation Dissertation Fellowship, and the Henry Roe Cloud Dissertation Fellowship at Yale University. This research also received funding from Berkeley's Center for Race and Gender, and the Graduate Division Summer Research Award. So many thanks to all of the anonymous reviewers and the administrators of these grants and fellowships, without whom I would not have had the time and security of funds to do this work. Of course, no degree is possible without departmental staff members past and present: Marjorie Ensor, Nat Vonnegut, Josh Mandel, Mike Jones, Eron Budi, Darin Jensen, Alicia Cowart, and Sarah Varner. A thank you also to Wendy Wolford, who helped me find my way to Berkeley Geography from Development Sociology, and to Raj Patel who helped me segue from one to the other. I am grateful to my MPH advisors, Phuoc Le and Anke Hemmerling, and the Native American Health Center (NAHC) of the San Francisco Bay Area, who helped me complete a Master of Public Health degree at Berkeley along the way to my doctorate. I would also like to express my appreciation for those scholars who read and recognized my work as important as I finished this dissertation and began to chart out my future endeavors: Ned Blackhawk, Lisa Lowe, Alyssa Mt. Pleasant, Mishuana Goeman, Jolene Rickard, and Suman Seth.

I want to honor the Gayagohó:no' (Cayuga) peoples, on whose lands near lake Tiohero I now live with my family and where this dissertation was written, now called New York state. My roots and routes keep me coming back here. This dissertation would have been impossible without the friendship, brilliance, and guidance of the Haudenosaunee people—acquaintances, friends, and family—who care for these lands and our peoples. As I preoccupied myself with finding stories, archives, analyses, and hooks for this dissertation, your insights and your patience with me over the years have been invaluable. These relationships have been the purpose and fulfillment of this work. My friends, sisters, aunties, and cousins who made me feel at home as I returned to our homelands: Jane Mt. Pleasant, Marissa Corwin Manitowabi, Kaluhyanu:wes Michelle Schenandoah, Gabrielle Iakotennikónhrare Doreen, and Yesęnaru'hčręh Wendy Bissell. To the people at Kanatsiohareke's Indigenous Writers Retreat—Tom Porter, Bonnie Jane Maracle, Jan Longboat, Gayle Skawennio Morse, Jan Hill, Shelby Loft, Alaina George, Adrianne Lickers, and Diane Hill—for the space and time to write and remember why I am writing, and how to think with a good mind. I hope this work can honor you all. Any mistakes or missteps in these pages are, of course, my own. Thank you also to anyone I may have forgotten who was instrumental in this project.

At the end of the day, we always come home to our families. So my gratitude for them sits here at the bottom of this long and loving account of those who are behind this document and process. First: thank you mom, Vera B. Bauer Palmer, for showing me with your courage and tenacity that while the academy may not ever truly see us, we can proceed through it with grace and backbone to become helpers. Your bravery and beauty guide me every day. For my father, Edward L. Palmer: your spirit of play and curiosity and love of learning warmed an ember in me that losing your presence on this earth could not douse. For my life partner, Alexander Hoepker: your steadfast love, admiration, and daily validation have carried me on this long journey. For my daughter, Raphaella Vera:

you were born to strawberries in the middle of my PhD, and you kept me so busy I was able to find steadiness again amidst your laughter and love of adventure. To all my family, kin, and relations: you have nourished and nurtured me during the last eight years in ways that words cannot capture.
Nyá:wę.

Meredith Alberta Palmer
July 2020, Gayagohó:no' lands, Ithaca, NY

Introduction

Colonization became a mission, and the Savage became absence and negation. The symbolic process through which the West created itself thus involved the universal legitimacy of power—and order became, in that process, the answer to the question of legitimacy. …the geography of imagination and the geography of management appear to be distinct yet intertwined, both empirically and analytically."

– Michel-Rolph Trouillot, *Anthropology and the Savage Slot*, (2003, 22)

"every time they counted us they knew the precise number to get rid of."

– from *Love Medicine* by Louise Erdrich (1984)

At the moment that the concept of race was declared a social construct in the social sciences[1], the measure of racial health disparities became a lead research and policy focus in the United States. In 1985 the first governmental report on racial health disparities was published by the US Department of Health and Human Services, measuring non-white racial groups' health outcomes against those of white people. The alleviation of racial health disparities in 1985 was taken at the national level, for the first time, as a project to achieve democratic rights and social justice.[2] Native peoples who live in North America, considered as a unified group, were figured within these studies as a singular *race* of people, and particularly as a race suffering from greater rates of disease and premature death.[3] Forcing together peoples from hundreds of tribal nations and backgrounds and varying urban Native communities within health measures and metrics, these kinds of statistics retrench centuries-old troubling constructions of Native people as *Indians* by Euroamerican colonial actors. On the other hand, advocates and activists for Native health struggle with a lack of quality data about Native health outcomes: data necessary for communicating the deep inequalities that do exist, for receiving funding, and for framing the needs and demands of their communities. During my time researching this dissertation, Tuscarora, Haudenosaunee scholar Rick Hill posed a question to me that has served as a guiding distillation at the center of my writing: "how can we heal from intergenerational trauma without recreating the figure of the *damaged Indian*?" My dissertation suggests that the ethical demands of healing in Native communities go beyond these racializing measured differences and colonial bureaucracies, to upend and refuse a range of discursive practices that mark Native people as damaged. The *damaged Indian* is a figurative product that is the material and discursive production of US colonialism. As a scholarly addition to this broad claim, I will show how the colonial politics of race, and the racial politics of colonialism are deeply entrenched in practices of measures: counting, quantifying, and metrics.

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[1] See, foundationally, Omi and Winant (1986)

[2] See the Heckler Report (Heckler 1985).

[3] Today, this category appears in most public health data as "American Indian/Alaska Native," often shortened to AI/AN.

This dissertation traces how colonial and state officials have constituted and deployed *Indianness* as a biological and medical marker of deficiency. I ground these analyses in the portion of Haudenosaunee country that is today territorialized as New York State, showing how these figurations of Indian infirmity present the dispossession of Haudenosaunee peoples as inevitable and necessary, reproducing colonial socio-spatial relations of occupation. The Haudenosaunee are a confederacy of six peoplehoods or "tribes" who are often called the Iroquois: Seneca, Tuscarora, Cayuga, Oneida, Onondaga, and Mohawk. The word *Haudenosaunee* translates to "people who are making a longhouse" which is not a mere ethnologic descriptor of Haudenosaunee housing, but rather a political and socio-spatial process. The longhouse is a geographically referenced political institution,[4] which pertains to homelands that extend from what is today Lake Erie, across parts of Ontario, throughout New York state, down into Pennsylvania, and over towards Quebec. The Western door of the people who come together united in this territorial longhouse are the Seneca, the Onondaga sit in the middle as the keepers of the council fire, and the Mohawk reside in the East. The Cayuga are to the West of the Oneida, and the Oneida to the East. Today, as Haudenosaunee people we live across our homelands both on and off reservation territories, and around the world. There are twelve colonial-government recognized land-bases or reservations in both the US and Canada, with 30,000 Haudenosaunee living in Canada, and 28,000 living in New York State alone. As a Tuscarora member of Six Nations of the Grand River, which is situated in southern Ontario, Canada, I am one of the many Haudenosaunee people who grew up and live off of reservation territories, but still on confederacy homelands.[5] Living multiply international identities—tribal citizenship, and US citizenship; a US home-base with family and ancestors on and off reserve lands in Canada—my own mobilities and my relationships to people and communities articulates with the mobile, multi-national lives of many other Haudenosaunee people, including relatives, and those I read about in archives, interviewed, sat with, and built relations with before and during my research for this dissertation.

The work of Haudenosaunee studies scholars has shown how federal health research mandates to include Native people prompted tribal communities to create their own research protocol (Hoover 2017), and how past traumas from boarding schools to invasive testing has precipitated deep distrust in communities (Haring et al. 2018). My work pulls back from this important, grounded work to examine how figurations of Indianness affected federal and state policy and local practices in Haudenosaunee communities in New York state. I show that the naturalization of Indian death and disease is constructed through racializing figures of *the Indian*, and that shifting anti-Indigenous figurations have emerged in relation to colonial concepts of land, the family, and the body. Beside the question of the material status of race or the biological effects of

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[4] Each longhouse was, and is, presided over by a Clan Mother, who had particular duties over political deliberation, distribution, and handling disputes, as well as spiritual duties. As home, and homelands, were determined by the mother's line, maternal identity itself was "the basis for Haudenosaunee territoriality" (Hill 2017)

[5] The bulk of this dissertation was written while I was living on Cayuga, or Gayonogoho homelands, in Ithaca, NY. This is 4.5 hours south of the Six Nations of the Grand River reserve, which has been my home-base though not my residence, throughout my life.

racial inequalities, the study of *racism*, while thin within Native American and Indigenous Studies, is an important and fruitful site for my inquiries. Ruth Wilson Gilmore (2007, 28; see also Gilmore 2002) has incisively defined racism as, "the state-sanctioned or extralegal production and exploitation of group differentiated vulnerability to premature death." The measures of health disparities, and other disparities such as death at the hands of police and other authorities, that proliferate today lend gravitas to Gilmore's analysis. Interrogating the processes of quantification and measurement of Indians and Indianness, I swerve her analysis of racism specifically towards anti-Indigeneity. In this effort I have found that processes of *naturalization*—meaning the process by which contingent social phenomena are made to seem inevitable or naturally-occurring rather than socially or culturally produced—are particularly central to the death-dealing of anti-Indigeneity.

Taking anti-Indigenous regimes of representation in the production of US settler sovereignty and space as a central object of this dissertation, I have found that naturalization emerges through specific prisms of biologization, pathologization, and medicalization. My understanding of naturalization is one that takes Nature and "the natural" as a concept that itself has arisen through particular historical processes (Moore et al. 2003), rather than as a utopic essence that human-made repressive orders have forced any given society away from. In other words, following Hall (1986; 1997), naturalization is "a representational strategy designed to *fix* 'difference'" (Hall 1997, 245) by appealing to a produced Nature or sense of the natural that is deemed stable and universal. Analyzing the work of naturalization as a productive form of power, I explore how appeals to biological processes of reproduction became imbricated in anti-Indigenous discursive practices of making and maintaining land-as-property in chapter 1. In chapter 2, I describe how the Indian family was pathologized as a site of disease and disfunction, producing carceral geographies of dispossession through Indian Boarding Schools' ordered bureaucracies. My third chapter shows how appeals to biology in claims of Euroamerican settler population geneticists produced a medicalized figure of the Indian as a diseased and divided subject. Each chapter engages in analyses of measures and metrics[6] in US colonialism, tracking their role as techniques of naturalization through accounting for difference or providing a narrative and explanatory framework for a particular supposed phenomenon. These measures and metrics are made up of practices, discourses, and calculations that shape and mark geographies and space, as much as bodies and life both human and otherwise.

There are three premises for my research. First, that the abstracted *savage* and its later supposedly realist object, the Indian or Native American, is a constitutive category of modernity and is therefore key to understanding how power works today (Anderson 2007; Byrd 2011; Williams 2012; Cattelino 2018). The *a priori* "Indian" that is imbricated in particular US settler sovereign concepts of freedom, reason, and order have shaped the discursive practices of property, family and sexuality, and biomedical research within settler liberal nation-states. Thus, the study of Native American and Indigenous

[6] I use the term *measurement* to describe practices of quantifying the amount or degree a defined characteristic, such as distance, height, disease incidence. A *metric* is a calculation between two measurements that is taken to be a standard or unit, so change across time can be managed or tracked.

politics and histories is not merely an optional engagement in the name of multicultural inclusion within the academy. My second premise that the United States is an ongoing project of colonial occupation, and that project is maintained through figurations of Indian infirmity. Canonical scholars of colonialism the disciplines of geography and postcolonial science and technology studies treat US imperialism as an era that originated in the late 1800s.[7] This reproduces in these fields the very colonial unknowing that undergirds US colonialism. Addressing this disciplinary aporia, I show how the United States is not an exception or exceptional, but is rather a foundational site of colonial institutions and technologies that continue to be deployed and refashioned in the US and around the world (Mamdani 2015).[8] My third premise is that Indigenous scholars within and outside of academia have found ways to draw on historic knowledge and practices from their lives and communities to build salient critiques of the reason and order that the West claims for itself. Producing critical theories of Indigeneity, historiographies with new emplotments,[9] and Indigenous literary and poetic imaginaries, Indigenous people bring to the stage, page and into scholarly debates worlds and lives that are entangled with, though never completely determined by, the ongoing violence of colonialism. To define our lives exclusively by social death-dealing does not capture the ways that Native peoples make and remake life itself and make life meaningful.

Recent critical scholarship on Native North America has drawn on indigenous assertions that the United States is still colonial, challenging both the "post-" in postcolonial, and the nation-bound model of subaltern studies (Byrd 2011; Goldstein ed. 2014; Simpson 2014; Coulthard 2007; Deloria 2008; Alfred 2005). Conquest in what is now called the United States, in a move towards US exceptionalism, has long been displaced in a multitude of ways. The death of North American Indians was naturalized by defining them as a naturally weaker race (Hegel 1837), the violence of US colonial conquest was downplayed through comparison to the bare brutality of South American conquistadores (Locke 1690), and more recently colonialism in the Americas has been popularly narrated as a technologically determined history overcome by the ostensibly progressive equality of the liberal democratic state (c.f. Diamond 1997). Recent scholars

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[7] See Smith 2004, Harvey 2005, Anderson 2006.

[8] Mamdani (2015, 608) writes, "Inserted in the history of colonialism, America appears less as exceptional and more as a pioneer in the history and technology of settler colonialism. All the defining institutions of settler colonialism were produced as technologies of native control in North America."

[9] Highlighting the role of historical emplotments as genres of analytical scholarship, Scott 2004 argues that romantic anti-colonial teleologies of revolutionary success reinscribe the binaries of Western enlightenment, and suggests the *tragedy* as a genre of emplotment that would interrupt these teleologies. I do not engage the language of tragedy in this dissertation, as it is the main genre through which misrecognition of Indian or Native American life and polities have been narrated from 1600s natural philosophers, up to modern US history textbooks. Claims and depictions of Native survivance and Native sovereignty, as I will argue in the next subsection, may be misread as moves towards a Western romantic teleology. I draw on Lowe's (2015) read of Scott and Scott's subject, CLR James' *The Black Jacobins*, suggesting that Native survivance, by drawing on understandings of collective belonging and sovereign political life that pre-dates the US state form, does not deign to sublate to the European state form, in either the Hegelian liberal or Marxian revolutionary sense.

have analyzed how colonialism operates through moves to innocence (Tuck and Yang 2012), through rewriting conquest as gained by consent (Rifkin 2009). Modern analytics of "post"-colonialism also often affirm the already-doneness of conquest in North America, ignoring the ongoing struggles Native people engage with in the US. Even while Indigenous people still actively challenging these erasures, *the Indian* continues to be a ubiquitous, if belied, figure in cultural, material, and academic production (Byrd 2011). As Indigenous erasure produces an absence and colonial agnosia towards Native life, racialized figures of Indianness construct an image of Native life that are projections of white settler anxieties, desires, and values. Thus, alongside Indigenous erasure and disappearance narratives, there is a pervasive and false sense of familiarity with a figure of the Indian. Many people have ideas about what the Indian is, or collectively what Indian tribes or nations are and were, in their minds. False figures have come to matter recently in more public ways that are shown to damage Native people and particularly youth (Fryberg et al. 2008). Sports team mascots, Disney portrayals, heads on coins or bodies on butter packages circulate in popular media, and stories of mass death due to disease and stereotypes about casinos and alcoholism circulate in textbooks and classrooms. Undergirding these everyday images and imaginaries, throughout United States history 'the Indian' has been a multivalent figure through which US American space and subjectivity have been produced (Vizenor 1994; Deloria 1998; Huhndorf 2001). Countering these false figures, and living with them despite their drive towards Native death as Native people do every day,[10] calls for understanding and analyzing them.

The notion of a figure, or figuration, is taken here to mean the particular assemblages, both changeable and enduring, of technologies, techniques, discourse, and practices that emerge contingently at particular historical moments that bring a particular concept, in my study, of *the Indian* into being.[11] Both a noun and a verb—*to* figure, and *a* figure—figuration is a processual articulation (Hall 1986) of subject formation and power relations. Each chapter of my dissertation also tracks how particular measures and metrics form "lines of tendential force" (Hall 1986, 53) which hold these articulations

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[10] Fabris (2017) builds on Simpson's work, writing, "Simpson (2014) also points to this genocidal tendency in her critique of the politics of recognition. She argues, 'settler colonialism structures justice and injustice in particular ways, not through the conferral of recognition of the enslaved but by the conferral of disappearance in subject. This is not seeing that is so profound that mutuality cannot be achieved' (p. 23, emphasis added). Therefore, in settler colonial contexts, the process of producing colonial subjects isn't just about the creation of 'rigid boundaries' around Indian subjectivity but is also about eliminating Indigenous peoples as a subject position altogether." This dissertation focuses less on the drive towards death and elimination of Indigenous peoples itself, and more on the formations of racial and colonial subjectivation that contour that drive as Native people live with it every day.

[11] Thus, my use of figuration is unlike Haraway's use of figures and figuration, in which she assembles figures of the cyborg, for example, as a positive move that aims to break out of modern dualisms and dominant taxonomies. Instead, following Arvin (2015) I explore in each chapter ways that Indigeneity as lived does this work of subversion and refusal, without creating my own new figures as a researcher. Like Vizenor (1994) I am interested primarily in which Indiannes or what he calls "the tribal real" is replaced and superseded by simulations, and simulations of simulations, of tribal life and Native people as a move towards erasure and absencing.

together across time and space. While my work elucidates distinct changes in the figure of the Indian through time, I suggest that in each of the historic moments I study Indianness is figured by colonial actors as a state of dismemberment. The basis of Indian dispossession is founded not merely on stolen land, as I detail in chapter 1, but rather in the dismemberment of Native life and relations in forming the white possessiveness of US settler sovereignty.[12] This dismemberment is not an ontological state of Native life, but one of subjectivation which ultimately renders Native life illegible. However, making Native life legible is not my project. By understanding the body as materialized through historic processes of subjectivation in which the production of abject or deviant bodies instantiates and reinvigorates a norm (Butler 1993), I analyze Indianness as dismemberment as an aspect of making the normed, white self-sovereign (Moreton-Robinson 2015) body. Analyzing the co-constitution of subjecthood and space, this study of the production of bodies is also one of the production of the body politic. I use the term dismemberment—a surgical and murderous tearing apart—as a way to gain purchase on something that reaches beyond an image of the body that supposedly ends only at any one person's skin. The production of Indianness has attempted to take apart and divide the Indian: from the present, from the land, from kin human and otherwise, and from one's fleshy felt body itself.

Entangled sovereignties

This dissertation examines how projects of US colonial rule are constituted through and against images of the Indian in the realms of law, education, and science. As a study grounded in a commitment to the spatiality of the racial politics of US colonialism, I draw on Moore's (2005) amendment to Foucault's analytics of governmentality to analyze how US colonial political technologies of rule produce and naturalize territories not only of the state, but overlapping and shifting landscapes of occupation and governmentality. This is not an analytic of a singular settler sovereignty or colonialism which is defined by a unitary logic, but rather how "emergent projects of colonial…rule articulate with shifting sedimentations of subjection and spatiality" (Moore 2005, 9). The United States, in my analysis, is not a place, but rather a colonial project. While it portends to be isomorphic with a geospatial referent found perhaps on a map, territorially the US is an uneven and non-uniform ensemble of various landscapes of rule and responsibility.[13] Each chapter of this dissertation describes how colonial projects, in different historical moments and contexts, is made possible and how it conscripts

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[12] Building on Harris (1993), Moreton-Robinson shows how Indigenous sovereignty is perpetually undermined by the reproduction of white possessiveness of Nation-States that scholars since have defined as "settler colonial", and calls for a critical analysis of various "regulatory mechanisms in reinforcing the prerogatives of white possession" (YEAR: xxiii), which is a central focus of this dissertation.

[13] Goldstein (2014, 1) argues that the US, "has never been a uniform or unequivocal geopolitical entity… the United States encompasses a historically variable and uneven constellation of state and local governments, indigenous nations, unincorporated territories, free associated commonwealths, protectorates, federally administered public lands, military bases, export processing zones, colonias, and anomalies such as the District of Columbia that do not comprehensively delineate an inside and outside the nation-state."

Native, and particularly Haudenosaunee, people today. While this analytical work is done in each chapter, my focus on the concept of sovereignty necessitates an elucidation of how understandings of Indigenous "sovereignties" have come to be, and how they are contested from various angles.

The US as a white possessive settler state has positioned Native nationhood as one of historic statelessness, made law in the famous 1823-1832 'Marshall Trilogy' of US Supreme Court decisions that provide the basis for Indian law and nationhood. Chief Justice John Marshall named Native states "domestic dependent nations" in these court cases. An unprecedented and paradoxical combination of "domestic dependents" and "nations," this terminology for the legal status of Indian tribes in the eyes of the US federal government has resulted in an unstable and pliable merger of contradictory positions—of wardship on the one hand, and of nationhood on the other—into one (Piatote 2013). These court cases also put Native reservation lands in trust of the US federal government, which then held sole right to purchase or conquest. Marshall's legal justification for this subjugated position was the United States' adoption English Crown's right of conquest as proclaimed in the Doctrine of Discovery, ironically proclaiming the right of conquest long before many Native lands were actually taken. As Mohawk scholar Audra Simpson (2014) has noted, sovereignty is a legal and language game that is a "care package from hell." Yet Indigenous scholars and scholars of Indigeneity also note that Native sovereignty as it is understood and lived by Native people does not map on to the liberal nation-state and is often unintelligible in the normative language of Western national identity (Coulthard 2014), despite the use of the English word.

In this dissertation, I refer to Indigenous sovereignties and specifically to Haudenosaunee sovereignties throughout. I do not use sovereignty here to refer exclusively to Native communities' struggles for treaty rights and investments in—sometimes exclusionary—liberal "humanist models of governance" (King et al. eds. 2020, 7). While the nation and nationalities seem to be obligatory categories of liberal capitalist space and political subjectivity they do not wholly encompass the spatial politics nor determine the subjectivity of Native peoples. The use of the term "sovereignty" in Haudenosaunee country in particular, as Tuscarora scholar Jolene Rickard has incisively iterated, has community and cross-community historic meaning and is used to describe "philosophical, political, and renewal strategies" (Rickard 2011, 467) which do not claim the coherence of a Western sovereignty (Vizenor 1994). Clarifying a relationship to land that is based on responsibility and kinship, rather than governance of people and territory, Mohawk legal scholar Patricia Monture-Angus describes demands to have Indigenous sovereignty respected as "a request to be responsible" (Monture-Angus 1999, 36), rather than a constrained request for the right to govern territory. While these concepts of sovereignty adopt the English word, Simpson (2014) shows, for example, how what is called 'sovereignty' as it is enacted by the Kahnawake Mohawk is not wholly circumscribed by the Western nation-state form or struggles for recognition within that framework, but draws on a Haudenosaunee governance structure that is over a thousand years old. This form of membership and government, as in most Haudenosaunee communities, is based on *Gayanerekowa* (Great Law), forms of social and governmental relationships that do not claim the primordial yet precede conquest, and are not spatially limited to a carceral territorialization of the reservation.

Indigenous origin stories play a critical role in shaping everyday politics and social behavior of Indigenous peoples. Yet, stories including origins stories have been mythologized: figured as fanciful or primitive stories of another time, only for children, or existing as mere metaphor. They are often mis-read as signs of essentialism or romanticism if included in interdisciplinary critical Indigenous scholarship. This treatment of story belies the treaty-making and agreements that are held and communicated through story, and the worlds, social and political, they hold and regenerate. It denies the ability and agency of Indigenous people and scholars to engage in their own form of representation that, while never a reproduction of the real (Vizenor 1994), is instead driven towards Native liberation and survivance. Reading the inclusion of story and so-called tradition as essentialisms asks for empirical proof, as there is "an imperative in the academy to make Native peoples knowable" (King et al. eds. 2020, 2). It also constructs boundaries between 'belief' and 'fact' that relegates such Indigenous stories to a metaphysical and metaphorical realm, akin to a bedtime story or a spiritual koan. Origin stories, I show in this dissertation, affect everyday politics, and everyday politics are inflected in how, when, or where we tell our origin stories and how they guide us through research. For example, the Haudenosaunee origin story of Sky Woman is also inflected in modern tribal practices and has changed in particular moments in relation to colonial politics. As Haudenosaunee scholar Barbara Mann (2000) has noted, the cyclical sovereignty of Native nations draws from these origin stories, which place humans in treaty with other beings and with each other. These relations are constantly remade and reconfigured and reckoned with through continual treating: as affirmed in the Marshall Trilogy of supreme court cases in the early 1800s that set all precedent for Indian law in the United States, and in a way that is distinct from the claim of historical right of conquest of humans over territory as analyzed by Foucault (1978).

Native sovereignties are practices and statements of self-determination as a people in relation with various ancestors, beings, and locations, which are variously ensnared with colonial constructions of sovereignty which are the focus of this dissertation. The idea of the reservation as a bounded place is always challenged, and membership and practices of belonging stretch far beyond those carceral bounds and beyond humanist conditions of consent that undergird the narrative that Native people willingly sold their land to Euroamerican settlers. Native sovereignty has an alternative genealogy than of Foucault's Euro-centric read of sovereign power offers, and within Native politics today there are often multiple, overlapping and competing sovereignties beyond the singular colonial nation-state (see Moore 2005 for an example of this analytic). Indigenous futures are defined by these multiple sovereignties, and thus must reckon with its figurative productions of Indianness. It is imperative to do so in ways that open Indigenous futures, and that attempt to reckon with the grief of loss, the reactive nationalisms, with imposed and adopted forms of patriarchy, and with anti-Blackness (see King et al. eds. 2020). The spatial practice of Native social life is one of relationships with ancestors, beings, movements, locations, seasonal variations, our own bodies, and of particular and multiple places not often designated Native spaces (Simpson 2014; Goeman 2009; Silko 2000; Million 2009; King 2003). I touch on examples of these relations and spatial practices in my dissertation. The Oneida women reclaiming relationships to land, which I describe in my first interlude, are doing so outside of state-sanctioned Indian sovereignty in upstate New York. In my third interlude, I show how Ojibwe poet Heid Erdrich narrates her

relationship to her own body in a US colonial context through stories of Rabbit in order to reframe genetic inheritances of Indianness as a gift, rather than a burden. These reckonings are part of everyday Native life.

The racial politics of US colonialism

What is the relationship between US colonialism and racism, practically and analytically? Codifications of difference form the discursive practices that materialize racial hierarchies which are written into legal, scientific, and bureaucratic understandings of "the Indian" which shape colonial processes and Native life and land today. Racial difference, this dissertation will show, is (re)produced through settler and colonial dynamics of occupation and the ongoing place-making project of settler sovereignty. Yet the politics of US colonialism, or so-called 'settler colonialism,' are not unitary or all-encompassing, and this recent analytic has its own problematic assumptions, which this section will discuss. Scholars have built vital foundations of knowledge, parsing the ways that race has been invoked differentially to produce the (after)lives of plantation slavery (McKittrick 2013), immigrant labor exploitation (Lowe 1996), and the relations of capitalist imperialism and racial capitalism (Coulthard 2014; Robinson 1983) through Euroamerican occupation. Racializations and racisms work vis-à-vis a comparative or analogous co-constitution of groups or populations. This dissertation focuses most explicitly on the work of anti-Indigenous racism in US colonialism.

At a moment in which there is a growing drive and aspiration for "inclusion" within the global, often rights-based, framework of "Indigeneity," such inclusion has also been shown to have limits and ongoing colonial entanglements and should not be romanticized (Million 2009). I use the term Indigenous narrowly to refer to Indigenous peoples of North America who, as described above in the language of Indigenous sovereignty, pre-exist the colonial nation-states that have occupied their lands through various modes of gendered and racialized domination that have constituted the territories, populations, and individualities which are the subject of this dissertation.[14] Scholarship that takes up the term Indigeneity must, nonetheless, do justice to the intellectual and activist work of Native American peoples in articulating and developing the framework that has made the term salient at the international level. The concept of Indigeneity and Indigenous is historical and changing, and should be taken not as an essential or essentializing character definition, but rather, as Vizenor (1994) frames it, another term that falls into the trap of the misrecognition of all language yet is nonetheless working towards Native liberation.

The study of postcolonialism, the study of race, and the study of people Indigenous to what is called North America have been largely disciplined within the

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[14] The term Indigenous can be used as a much broader category than I do in this dissertation, and my use of it to refer to those in North America is not a move of exclusion, but one of precision and context. While not within the scope of this dissertation, it is vital to stress the importance of the both/and possibilities of Indigeneity and other racialized peoples. Analytics of Indigeneity have often been silent to the historic and present ways in which, for example, Black-Indigenous people have been denied membership to tribes (Sturm 2011, Byrd 2011), and to the Indigeneity of African peoples who were taken into slavery across the Atlantic. This dissertation also does not discuss Indigeneity in Central and South America.

academy as different areas of research (see Baker 2010), and the scholars who do cross these disciplinary boundaries are vital but few. These institutional and discursive divisions have produced a paucity of analyses of the racialization of *Indians*, or of the US as a colonial space. Byrd presents a critique against collapsing racialization and colonization, arguing that they are two distinct types of domination. To collapse them, she writes, "masks the territoriality of conquest by assigning colonization to the racialized body" (Byrd 2011, xxiii-xxiv). The making of native lands into "domestic" space, she argues, is the condition of possibility for "antiracist" inclusion of Indians as US citizens, rendering unintelligible indigenous polities and governance. Alternatively, Biolsi argues against the wholesale rejection of racial identification. Arguing that, "Indian people…cannot afford not to see themselves as a racial minority in a race-stratified society" (2005, 254), he views racial identity as a possible place of empowerment for Indian people. I suggest that taken together, Byrd's warning against the colonial politics of multiculturalism and Biolsi's call to strategic awareness and affinities are both insightful and useful. My dissertation shows how this seeming dichotomy between being a racial group and a colonized people has historical entanglements that cannot be disarticulated.

Recently, the field of 'settler colonial studies' has risen as a space of academic discourse that attempts to delineate colonialisms in which white Europeans arrived to create a new system of home rule over and against Native or Indigenous societies. These most often reference the United States, Canada, Australia, New Zealand, and sometimes though rarely, South Africa. Since Patrick Wolfe wrote his influential book, *Settler Colonialism and the transformation of anthropology* (1999), the term has proliferated in journals, academic books, and conferences. Most recent publications refer to settler colonies as those countries where an Anglo-European *majority* has established independent self-government, usually in the form of a liberal democracy, and importantly for this essay, where Indigenous or displaced people remain a *minority*, with the exception being the less frequently mentioned South Africa. Wolfe's work has much to offer for the revitalization of debates around ongoing occupation in the US and other Anglophone, liberal democratic colonies, within the academy. Wolfe's formulation of settler colonialism's logic of elimination and dual settler-colonial disinterest in extracting labor from native bodies is most frequently the operative focus (Simpson 2014; Coulthard 2014). Addressing the binary of land and labor, my first chapter will argue, figurations of Indian labor are in fact constitutive categories of liberalism, namely property. Constructions of the Indian body as one that does not labor productively were key to the production of land-as-property in post-revolutionary United States. I examine the particular forms of anti-Indigenous racism that emerged in this era, and how they shape modern conjunctions of land and law. Scholars who take up Wolfe's framework flag the importance of resistance to racialized minoritization of First Nations and Native American peoples (Simpson 2014). However, I argue that critical analyses of projects of racialization and racist modes of US colonialism are not equivalent to a project of minoritization or liberal multiculturalism, and that minoritarian politics quite prominently shape Wolfe's own typology. A given nation can be defined as settler colonial, for Wolfe, if the population of Native people is smaller than that of settlers. He writes, "what if the natives themselves have been reduced to a small minority whose survival can hardly be seen to furnish the colonizing society with more than a remission from ideological

embarrassment?" (Wolfe 1999, 1).[15] The crucial resistance to and refusal of understanding First Nations and Native American peoples as another racialized minority within a nation (Simpson 2014; Byrd 2011) or refusals of an imperial settler/native dichotomy (Byrd 2011) are at risk of being implicitly re-inscribed when this generalizing framework of settler colonialism as a 'type' of state or state power is adopted wholesale or clumsily. Therefore, while my work draws on scholars who do adopt and build on Wolfe's analytic, this dissertation does not use settler colonialism as a framing device.[16]

By focusing on the co-constitution of Indianness and Euroamerican settler modes of belonging and self-making, particularly in Western New York, Haudenosaunee country, I am able to examine the racial politics of US colonialism without conceding to any stable material reality of an imagined "Indian race". By narrating a recursive genealogy of the occupation a particular people, in a particular place, I detail US colonialism's multidimensional, sometimes contradictory, spatial form of occupation. The co-constitution of subjectivities and space are created through and in opposition to particular figurations of savagery, Indianness, and Blackness. This dissertation primarily analyzes the workings of anti-Indigenous racism as constructed through the figure of *the Indian*, and only briefly touches on related anti-Blackness inherent in the creation of such a figure, or other racializations of US colonialism. In my analysis, I modify Simpson's claim that so-called settler colonialism has either succeeded or failed on its own terms (2014) by removing the imperative for an over-arching logic (in this case, a logic of elimination) by which those terms are set. Analyzing the contingency of events such as the retrenchment of land-as-property as an anti-Indigenous enactments of settler landscapes in law, as I do in chapter 1, removes any sense of theoretical guarantees for

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[15] This minoritarian argument undergirds Wolfe's Hegelian programmatic, in which he frames settler colonialism as a set of practices defined by a "zero-sum conflict" (3) between minority 'natives' and majority 'settlers', made legible through the analysis of contradictions within 19th and 20th century anthropological debates that contradict a metaphysical "logic" of elimination.

[16] Analyses of settler colonialism have served at times as a ledge on which Native American and Indigenous Studies scholars and concerns can gain a foothold in fields traditionally dominated by non-Native academics and continental theory. has also been an intellectual space still itself reproducing erasure of prior Indigenous academics, and analysis of Blackness and Black analyses of humanism (King 2019). Echoing McClintock's critique of the term "postcolonial," where she argues that a singular analytic category "may too readily license a panoptic tendency to view the globe through generic abstractions void of political nuance" (1995, 11), this dissertation does not take on settler colonialism as an explicit framework. Additionally, such abstractions focus intrinsically on concepts of land and *terra nullius*, and thus implicitly and otherwise allow Blackness as a study and Black people themselves to be largely excluded from discussions of global Indigeneity and settler colonialism. This includes Black Indigenous and Afro-Indigenous peoples in the Americas inclusive of United States, and people on the continent of Africa as well. If Indigeneity is going to continue to be a salient category through which people route their identity (Collective 1977), those who use it should take note of how the frame of "settler-colonialism" is at times used to reinscribe anti-Blackness within its own framework, and recreates the mapping of Native/Black binary figures onto the Land/Labor binary. My dissertation, particularly the first chapter, addresses this binary directly by touching on the ways that Indianness was figured in relation not just to a white possessive subject position, but also to racist figurations of Blackness.

the reproduction of US colonialism.[17] The productive power of categories and institutions formed in the crucible of conquest in the US, such a property, bureaucracy, and the self, refashion white possessive subjecthood interdependently with Indianness, but not with a lived Indigeneity (c.f. Morgensen 2011). By texturing the spatial dynamics of US colonialism in a grounded and relational analysis, I am able to show how figures of the Indian are made and remade through particular politics of place. US colonialism not only lacks guarantees and requires daily remaking, but also is not a uniform spatial dynamic. For example, as I show in chapter 3, while Native people in New York were made exempt mid-1900s federal policies of Termination of reservation lands, and Relocation of Native people into cities, state developmentalism effected particular forms of dispossession through the construction of energy projects. The anti-Indigenous racisms that undergird the occupation of Haudenosaunee peoples and lands are particular, shaping the lives and lived spatial practices of Haudenosaunee people in upstate New York and beyond.

Analytics of land and labor

Critiques of land-as-property, of the meaning and workings of labor, and of the power of money in shaping inter- and intra-human and non-human relationships, have existed in Haudenosaunee communities and philosophies long before and since Marx wrote his works on the topics (Haake 2015; Mohawk 1977). Cold War politics left Haudenosaunee and other Native people defending their Indigenous critiques of US colonialism and of capitalism in a portentous milieu of McCarthyism and the Red Scare, when antagonists charged tribes who relied on the US federal government's treaty-guaranteed resources and funds with "socialism," and tribes were considered communist by nature. Though Indigenous critiques of the spatial dynamics of capital and the US nation-state in the 19th and 20th centuries have not often been iterated in Marxian terminologies, they remain rich analytics of colonialism as it is experienced by Haudenosaunee people. Bridging Marxist and Indigenous—particularly Haudenosaunee—critiques of US colonialism, this dissertation engages analyses of the workings and categories of land and labor in its critique of capital. While analyses of the spatial dynamics of capital accumulation are important for understanding how domination works and is reproduced in and as modernity, I decenter its analysis. Rather than considering racism and colonialism to be an aspect justifying the spatial relations of

[17] Hall's (1986) analysis of concepts of the idea*logic*al are useful here for understanding the way that the idea of logic has been used to describe the way that power works through a "logic of elimination" in so-called settler colonialism. He writes, "the *problem* of ideology is to give an account, within a materialist theory, of how social ideas arise. We need to understand what their role is in a particular social formation, so as to inform the struggle to change society…by ideology I mean the mental frameworks—the languages, the concepts, categories, imagery of thought; and the systems of representation…" (29). Writing of Marxian theories of change, he explains that a "marxism without guarantees…establishes the *open horizon* of marxist theorizing," to argue against a determinism in which, "political outcomes and the consequences of the conduct of political struggles are foreordained in the economic stars" (43). Removing any sense of theoretical certainty from an analysis of settler colonial logic or ideology establishes an understanding of historic contingency, and points toward conjunctural openings for change.

capital, I analyze capitalism as a historic emergence within the racial and spatial dynamics of colonialisms, bringing Haudenosaunee worlds and analyses to bear. This dissertation examines how techniques of power that have emerged through co-constituted projects of conquest and capital have produced specific spatio-temporal orders of nature, place, and difference.

Marxian critique came to be institutionalized in US anglophone discipline of Geography in the mid-1900s as a way to study the spatial dynamics of inequality. Yet the discipline of geography and Marxist critique within it serve more often to maintain racisms, including Indigenous erasure, than critique it (Pulido 2002, De Leeuw and Hunt 2018, Oswin 2018, Hawthorne 2019). There have been attempts to uncritically redeem dominant lineages of academic Marxist critique from its conspicuous indifference towards Native issues in the US and Canada by appealing to classical foundations of Marxist literatures on imperialism and to Marx himself (e.g. Foster et al. 2020). Ignoring the influence of Lewis Henry Morgan's work on the Haudenosaunee on some Marxist teleologies, or the "already doneness" of US colonialism as framed by both Marx himself (Marx 1992 [1894]) and in analyses of imperialism since, or continuing to frame racisms as mere justifications for dispossession and exploitation in a capitalist superstructure, does not allow for scholarly debates grounded in historic, disciplinary, or institutional integrity. A philosophy of praxis within any scholarship that does not reflect on personal and institutional positions on the Indigenous lands on which they most literally sit will always be an homage to an abstract view from nowhere. Yet in addition to a questionable praxis, geographers who uncritically redeem the role of geography in colonialism without confronting its canon cannot develop a rigorous analytic of the production of race and space. My dissertation acknowledges these disciplinary histories and yet I maintain that a critique of capital is vital, as I will emphasize in this section, to analyses of land, bureaucracies, and data.

There is a constitutive commitment on the part of the colonial state to Indigenous corporeal disappearance, immediately violent and otherwise, in order to acquire territory (Simpson 2014; Coulthard 2014). The acquisition of territory, however, was not a singular event as developmentalist readings of Marxian analyses of primitive accumulation may imply (Coulthard 2014). While my first chapter focuses explicitly on land, landscapes of rule, and anti-Indigeneity inherent in the processes of making land into property, land as the emplacement of settler governance and the object of US colonial imperium is a theme that runs throughout this dissertation. My focus on land looks beyond the rentier capitalist. I show that transforming and maintaining land as property is an inherently racist—and anti-Indigenous—process, which did not happen once in the past for all eternity, but must be continually reproduced. In my first chapter, connecting the techniques of making land into property in the 1700s to a 2005 Supreme Court Case, I show how racist imaginaries of Indian land and Indian labor undergird the maintenance of settler sovereignty. I disrupt the land/labor binary as it has been conventionally mapped onto people racialized as Indian and Black, respectively. Particularly in the first and second chapter of this dissertation, I build an analysis of labor beyond the role of the subject position of the wage laborer, and instead as a racialized category that has been routed through hierarchies of difference that uphold US colonial occupations.

In the context of US colonialism, land and labor as categories are co-constituted with and through each other. In the era of assimilation that my second chapter focuses on, from 1880-1930, reservations became sites of interest for new forms of capital accumulation, namely agriculture, mining, and railroads (Biolsi 2005). Quite explicitly, US federal legislators reported that Indian assimilation was not a humanitarian effort, but a project aimed at extracting rich resources from reservation lands (Beardall and Escobar 2015). My dissertation shows that these projects would have not been possible without the absolution that the bureaucratization of US colonial occupation engendered. My second chapter, showing how Indian families and social relations were pathologized by state actors as spaces and sources of disease and deviance, explores the production of white innocence in projects of US colonial expansion. Performances of order and reason in Indian Boarding School case files and their documents produce this innocence through a bureaucracy that allows the spatial imperium of US colonialism to endure and to extend.

At the same time, within the Indian Boarding Schools, administrators trained students in practices of capitalist labor of material and social reproduction, in an attempt to produce a gendered and classed laboring subject. I show that this laboring subject was also conscripted into the racialized dynamics of poverty, naming Native life as "impoverished" and wage labor as the escape from this poverty and escape from the very subject position of Indigeneity. These invocations of Indian life and land as impoverished, I show later in chapter 3, resurfaced in mid-1900s debates around development projects on Haudenosaunee lands in upstate New York. New frontiers of knowledge, in the form of population genetics, framed themselves as humanitarian as they ushered in new frontiers of capital in new forms of dispossession based in concepts of biological measures of Indianness and racial authenticity. These past figurations of Indianness haunt the present. In a regime of colonial governmentality, colonial subjects now also play the game of liberal democratic recognition. Tracing historic constructions of Indianness, this dissertation provides an analytic for the ways that seemingly neutral measures and metrics are co-constituted through US colonialism.

Measures, nature, and the performance of reason

Categorizations of difference produced through colonial violence come to have meaning and matter through comparison, hierarchy, and measure. These orders are also a spatial process, arranging people and landscapes in a spatio-temporal hierarchy (Massey 2005). I propose that measurement is a primary modality of 'knowing' and representing colonial hierarchies of difference. In practice, the use of these measures and their metrics become regimes of apprehension: apprehension in the sense of both the anxieties of a fragile whiteness, and a captivation or carcerality within the figuration of Indianness through such representations. The production and measure of humanity congealed around race as a category of human difference, as white colonial actors became increasingly insecure about the meaning of being human as a racial distinction and as a distinction from other life forms on earth (Anderson 2007). Furthermore, the practices of measurement and the discourses of measures—explored in this dissertation through the land survey, the case file, and racial blood serology—produce and reproduce white subjectivities through the performance of a self-proclaimed and privileged Western reason and order. In other words, making an other, and making that other "knowable,"

was a practice based not in affirming a pre-given whiteness, but rather in the anxieties of a tenuous whiteness that required constant reproduction. To make the Indian 'knowable,' I show in this dissertation, was instrumental to the ongoing project of colonial and racial governmentality (Coulthard 2014; Goldberg 2002) that reproduced US colonial occupations.

Measures and metrics were central parts of colonial and state practice long before the marked rise in quantification of the late 1800s and early 1900s. Scholarship critical of humanism and the production of the human, which tracks the co-constitution of natural history and colonialism, is a rich resource for analyzing measurement and quantification in colonialism as a deeper historical practice (Fanon 1959; Eze 1997; Pratt 1992; Anderson 2007). Variation and difference in the what was or was not "human" was not 'experienced' or empirically described as they really are out there in nature, but "by and through a metaphorical system that structured the experience and understanding of difference and that in essence created the objects of difference" (Stepan 1990, 41-42). Tools for measurement and enumeration gave a sense of precision and Truth to such metaphors, placing peoples on a hierarchy of human technological, mental, and social complexity and thus measuring their supposed degree of separation from, or mastery over, 'nature.'

'Nature', as Moore et al. (2003, 3) argue, is imagined in colonial theories of difference as an "ontological foundation" for individual and social life in a postlapsarian vision of 'civil' society. As such, European natural historians and philosophers of so-called natural law produce the very 'natural' world they claim to discover and speak for through normative description. Liberal theories of natural equality were articulated alongside, and sometimes through, imposed taxonomical and empirical orderings of Otherness. Pratt (1992) terms this historic universalizing reach of knowledge production *planetary consciousness*, which figured itself as neutral, ordered, and universal. Haraway describes how "men became *man* in the practice of modest witnessing" (1997, 29). The transparent modesty of the early experimenter produced the illusion that nature was speaking through the experimenter/scientist, and that the nature of nature was speaking for its own ostensibly universal, God-given, self. Such pronouncements of neutrality and universality, as Haraway (1988) describes, embody the *god-trick* of science—the all-knowing and "conquering gaze from nowhere" which was, as my first chapter explores, a white European male. Women's physical exclusion from these experimental spaces of knowledge-making is written by many later-20th century science studies scholars as only as a regrettable side-story to the construction of scientific 'objectivity,' rather than itself constitutive of new meanings of man and woman, and these figures' respective relations to fact, knowledge, and persuasion. This witness was racially and geographically constituted as an Anglo, European male. Haraway touches on and Stepan (1990) expands how race and gender were co-produced through analogies and metaphors that constructed the scientific study of bodily form, sexual practice, and mental abilities. The masculine construction of normative 'objectivity' gives the authority to name and represent fact and nature. This construction is historical, and not based on mere structural *exclusion* but from actual scenes of knowledge production and regimes of apprehension.

Within these regimes of apprehension, measurement and metrics are an effect of power which work to define, regulate, economically manage, and govern what are deemed to be "populations" and bodies. Like Arvin (2019), I turn Moreton-Robinson's

scholarship on law and the possessive logics of patriarchal whiteness towards other realms of knowledge production. This dissertation thus intersects critical studies of science and technology with Indigenous studies to discuss the ways in which colonial practices of measurement are imbued with whiteness and property (Moreton-Robinson 2015), giving these practices meaning while materializing colonial landscapes.

Structure of the dissertation

With three chapters, this dissertation presents as a triptych that examines how Indianness as conceived within white Euroamerican settler techniques becomes written, spoken, calculated, and materialized[18] into everyday practices of measurement as a form of domination. Each of three chapters focuses on a particular technology and technique in its time of emergence as listed above—land survey, case files, and population genetics—and its imbrication in the geographies of occupation that shape Haudenosaunee lives in upstate New York then as today. Focusing on these technologies, I delve into the colonial politics that shape common sense scalar registers—land, family, and body—which I argue work simultaneously as sites of anti-Indigenous racialization and racism. Seemingly objective and perhaps banal, these three technologies emerged in particular historic moments as new means by which US colonial occupation was reconfigured. The structure of the chapters does not follow a direct chronology, but instead shows how these historic techniques and figurations of Indianness continue to *conscript* (Scott 2004) Native and Haudenosaunee people and lives into the US colonial project. Writing against readings of history which place their narratives in the past alone, as if the past could write itself, each section analyzes how these techniques are animated today and articulate with prior formations. Before each chapter is an interlude, which are proemial essays to the following chapters. The first interlude examines iterations of wastelands and homelands in three contexts: a court case lost by the Oneida, a psycho-social framework to healing intergenerational trauma, and a modern project of returning to stolen Oneida lands. The second interlude explores the personal politics of archival research of violence and painful pasts to suggest new methods of Indigenous archival research that bring our medicines, in this case strawberries, into the research process. The third interrupts the dissertation with an analysis of a poem written by Ojibwe poet, Heid Erdrich, who reckons with genetic racism and the violence of colonial measurements.

The first chapter examines the politics of race, indigeneity, and landscape in US American enactments of property. The substance of it is the homelands of the Haudenosaunee, anglicized as "Iroquois", now territorialized as central and western New York State. The 2005 US Supreme Court case *City of Sherrill v. Oneida Indian Nation* of central New York denied the ability of the Oneida to expand their sovereign rights onto former reservation lands through the purchase of fee simple title. In this chapter, I follow the genesis of the term "non-Indian character" of an area, which was first written in the *City of Sherrill* decision. Citing the "non-Indian character" of an area today appears as an appeal to customary use in property law, but actually redeploys common sense[19] colonial

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[18] Judith Butler (1993) describes materialization as an *effect* of "boundary, fixity, and surface."
[19] Settler common sense, for Rifkin, refers to the everday ways in which colonial power structures in the US are reproduced over and against Native nations. Gramsci wrote that common sense is, "continually transforming itself, enriching itself with scientific ideas and with philosophical

categories of race and place that belie Native American sovereignties. In tracing the genealogy of this term, I examine the history of land survey in the United States and the racial thinking embedded in the tools and discourse of property-making that emerged after the Revolutionary War. I provide a critical and contextualized reading of Thomas Jefferson's *Notes on the State of Virginia* (1785) in relation to his work on the Township and Ranges Survey System, as well as analyzing his letters. I then discuss how efforts of the Holland Land Company, New York state and US federal agents, and yeoman Euroamerican settlers rendered settler sovereign landscapes through acts of Haudenosaunee dispossession and concepts of Indian inferiority. To do this, I use archival research from the Holland Land Company archives at SUNY Fredonia in Fredonia, NY, including letters, survey field notes, survey reports, court documents, and maps. As Haudenosaunee, in this case specifically the Oneida, continue to challenge US legal concepts of land and law today, the settler state has reauthorized a framing of Native American sovereignty that is bounded and may only recede territorially. As such, I consider how racist understandings of Indian inferiority become reincorporated into techniques of making and maintaining land as property, to show how US sovereignty rests territorially on anti-indigenous concepts of race and place.

The second chapter, *Family*, focuses on the Thomas Indian School (1855-1957) in Gowanda, NY, which was an on-reservation and state-run Indian Boarding School. In the chapter, I take the strawberry—which sits in a central position in Haudenosaunee kinship relations—as a guide in the archives and a medium through which to maintain a narrative of Native life and survivance (Vizenor 1994) despite the abuses of the school. I analyze the case file as a technology of US colonialism which contains metrics of Indianness and supposed 'improvement' that, I argue, reveal the anxieties of the Euroamerican settler administrators of the school. In analyzing the contents of those case files, I find that the efforts of these administrators to separate and isolate children from broad kinship systems relied on anti-Indigenous discourses of contamination and disease, and practices of measurement and containment of their bodies. State and school officials strove to surveil and control students' sexualities, mobilities, and family relations, under the moral imperative to produce a healthy, atomized Indian subject who would have no relationships with their Native family, kin, and land on their reservations.

Focusing on the rise of humanistic sciences in the US in the mid-1900s, the third chapter, *Body*, traces discourses of Indian blood quantum from late 1800s racial science and anthropology through mid-century population genetics research on "primitive" populations. I show how new public health research in population genetics done among Haudenosaunee aligned with these policies and against community initiatives to define health and wellbeing by analyzing the way Indianness was constructed biologically, and molecularized, in scientific publications, research agendas, and in congressional hearings. I situate 1955 reforms in the US public health and the Indian Health Service within policies of Termination and Relocation—the federal government's dual attempt to dissolve all tribal sovereignty and landholdings in the US (1940s-1970s), and also move Native people to urban centers—while showing how New York State development

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opinions which have entered ordinary life" (Gramsci 2012 [1971]: 326, fn. 5). Like Gramsci's meaning of common sense (see Thomas 2009), Rifkin denies settler common sense of any claim it may have for itself of any universal or internal consistency, logic, or reason.

projects in this same era became Termination and Relocation by another means. Showing how the discursive practices of the settler state attempts to give form to the Indian body through new measurement techniques and discourses, I specify how Native bodies were rendered divisible in new—biologized and molecularized—ways that aimed to delimit and diminish tribal lands and sovereignties.

In closing this dissertation, I reflect on the question posed at the beginning of this introduction, about the ethical demands of healing for Indigenous peoples under occupation. Addressing the current public health pandemic, Coronavirus 2019, I suggest, in closing, that it is imperative to address these ethical demands outside of these colonial frameworks of measure and metrics. In framing future research, I briefly touch on a response to the coloniality of measures, Indigenous Data Sovereignty, which has come from a number of communities and is currently congealing in research institutions in the US.

Interlude I

Homelands/Wastelands and Colonial Metaphorics

As summer moved into fall in central New York in 2019, a piece of Oneida homelands met the feet of Oneida women again for the first time in almost two centuries. The pictures of their return to the land shared on social media and in news reports show it was a wet and muddy day. A group of nine Oneida women came together from three territories to receive and rematriate these thirty acres of land from the Quaker woman who donated it to them. A constellation connects three Oneida peoplehoods: the Oneida of Wisconsin, the Oneida of the Thames in Ontario, Canada, and the Oneida in upstate New York, in the homelands. In the 1700-1800s, the Oneida were encroached upon by Euroamerican squatters, land companies, and armies. Their vast swath of lands, forests, lakes, and creeks—an estimated homeland of about 5 million acres—was reduced to 32 acres in upstate New York. Groups of Oneida were relocated by the US government out to Wisconsin in the 1820s and 1830s, and another group purchased land in southern Ontario, Canada, in 1840 and established governance there. As a multi-tribal or multi-nation confederacy, Haudenosaunee governance and peoples have long and mobile attachments to the homelands of upstate New York: the lands upon which we made our homes, and with which we were active kin when colonial violences severed us from them. Coming back to these lands after all these years, the Oneida women are remapping relationships to those lands and waters and to each other.

The significance of these women's collaboration is historic. Just 15 years ago, a Supreme Court case, described in my first chapter, denied the right to reinstate their sovereign rights on misappropriated New York reservation lands which they had purchased back. The case, *City of Sherill v. Oneida Indian Nation of New York*, declared that the only legal avenue they would have for redress would be to create non-profit corporations and take the land in trust. Asserting their role as Haudenosaunee and Oneida women and as bearers of the people's territorial responsibilities, they have begun to form relationships with that land again despite the court's agnosia. I begin the next chapter with a quote from Justice Ruth Bader Ginsburg, who wrote the opinion for the *Sherill* case. In it she argues that the Oneida could not "rekindle the embers of sovereignty that long ago grew cold." As I detail in the next chapter, the metaphors she uses to describe her decision reveal the structures of meaning that underlie the confounding court decision. Likening Indigenous sovereignty to a fire or flame, Ginsburg naturalizes a constructed disappearance of Oneida governance over these lands by assuming that it faded away like a flame, merely because it is unrecognizable to her. Like the American novels, Western movies, and continental philosophers that made this kind of metaphor conceivable, the violent banality of invoking the "slow fade" of the vanishing Indian is as clichéd as it is commanding in the context of a US Supreme Court decision. She imagines that the Oneida—who were finally able to bring this case to court[20] —have emerged almost out of nowhere, and without a history of knowing who they are and are always becoming. Ginsburg's opinion also rested on the Doctrine of Discovery. That a US court can still today rest decisions on a decree given by a Spanish Pope in 1493 that names

[20] despite the insider debates on the wisdom and timing of it.

outsiders of Christianity to be barbarians and thus subject to death and dispossession is almost too absurd to take seriously. More than a legal decree, resting an argument on the Doctrine is, at heart, a rights claim based in morality. Originally, the Doctrine asserted that to spread Christian life and lifeways across the land, at the expense of the lives of non-Christians, was the divine right of Christians. Adopted into revisionist post-Revolution historiographies in the early 1800s, as my first chapter shows, the Doctrine was made to fit into new moral narratives of improvement of land, and improvement of government. The everyday retrenchment of US colonialism as a spatial phenomenon is articulated through narratives of morality, and the racialization of Indian lands and Indian bodies is at the heart of each new day's expression. The historiography held in Ginsburg's metaphors—of a supposedly naturally waning Oneida governance—is no exception.

Indian land was, in the eyes and laws of post-Revolution Euroamerican settler governance, wasteland. In 1784, 1785, and 1786, the New York State Legislature passed three different acts to, respectively *encourage*, *facilitate*, and *speed,* "the Settlement of the waste and unappropriated lands" within New York. The lands they wrote of were all Indian lands, most of which were still governed by and lived on by the multiple nations of the Haudenosaunee and the confederacy. These were lands which the state did not yet hold title, as they planned the construction of their mills, houses, and canals. "Unappropriated," they also called the land in the legislation, suggesting that land which had not yet been turned into settler-sovereign property was not just inappropriate, unpropertied, but *waste*. Barren, unwanted, left over, degenerate, garbage: the synonyms of *waste* are broad enough to leave room for many intimations of Indian land. The morality of a colonial project aimed at "improving" these lands rested first on denigrating the lands and their peoples, who were already there before European occupation. Though the US federal government had promised to protect these lands from Euroamerican occupation at the 1784 Treaty of Fort Stanwix, the state legislature and land companies were able to disregard governance at the federal level, and worked to territorialize these lands as part of the state first. With the same violent banality of Ginsburg's language 220 years later, they framed Indian lands as wasteland, thus circumscribing Indigenous places into their own ranked developmentalist narrative of space, quickly and selectively forgetting the rich Haudenosaunee agricultural productions that made the very settlement of the land possible.

The Indigenous struggle for space is an intergenerational project that never died out in Haudenosaunee country. Those who are my generation's grandparents and great-grandparents are remembered as ones who tirelessly wrote letters to the US government, such as Mary Cornelius Winder, or who travelled in 1923 to the United Nations in Switzerland to demand international attention to the rights of Native people, or who participated in the annual US/Canada border-crossing as my grandmother, Alberta Wright Bauer did with Tuscarora chief Clinton Rickard and many others. And their struggles for space were learned from their grandparents, and my generation and the younger ones learn from them all. The explicit connections made today between generating land-based practices and Indigenous healing and futurity, as the group of Oneida women have done, builds on generations of practices and knowledge.

Regenerating land-based governance and practices as a healing strategy has also emerged in particular ways among First Nations and Indigenous communities and nations

in the Canadian colonial context. In part, this has been in response to the deep failures of Canada's Truth and Reconciliation Commission (TRC) and related reconciliation efforts. Leading up to the 2008 founding of the TRC, the 1990s had seen Indigenous communities' varying analyses and excoriations of sexual abuse at Indian Residential Schools[21] became bound by a discourse of trauma and therapeutics. A key figure in the pathologization of the discourse of reconciliation as healing is Sousan Abadian. Abadian is a self-fashioned "Leadership Consultant and Sovereignty Coach," whose work on healing from trauma gained traction in the 1990s in First Nations and Indigenous communities under Canadian colonial imposition. Abadian's Harvard doctoral thesis, "From Wasteland to Homeland: Trauma and the Renewal of Indigenous Peoples and Their Communities," written under the direction of economist Amartya Sen, has been carefully critiqued by Million (2009) in a way that does not throw the Indigenous communities who adopted Abadian's framework under the bus. Million's critique of Abadian's historic trauma and approach to healing, an approach which has been picked up in wider development projects in the US, Palestine, and some post-colonial countries, unveils Abadian's underlying premise: that healing from colonial traumas is an individualized psychic project which requires that Indigenous people adapt to capitalist life to survive.

The materiality of land, and its historical construction as settler sovereign territory and property, falls out of Abadian's analysis. She instead uses abstract notions of land as a psychic space to argue that a return to an abstract "homelands" is a psychological endeavor alone. She writes,

> *The wasteland to which I refer inhabits our human psyches as much as aspects of life on some reservation/reserve. Today, there is far too much waste of precious life-force through substance abuse, violence, suicides, "accidental deaths," and more. To move from this wasteland and return home — home to oneself, to a sense of balance, wholeness and well-being, home to a vibrant, nourishing community — is to go from wasteland to homeland. The return home is a movement within the individual as well as within the broader community. Only individuals themselves can take the necessary steps…" (Abadian 1999: 8).*

The colonial metaphorics that frame her dissertation's arguments produce a figure of an injured Indian unable to let go of the past, and who paradoxically must submit to capitalist life within US and Canadian colonialisms in order to govern in the future. Echoing the same sentiments that I show are embedded in mid-1900's medicalized arguments of Indianness in Chapter 3 of this dissertation, Abadian argues quite directly, that collective and individual trauma can lead to a "diminished capacity to govern" and that the way forward is to heal one's self. The healed Indian, in this developmentalist

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[21] The US federal system of Indian Boarding Schools as innovated by General Pratt and the Canadian system of Indian Residential Schools that often emerged from Catholic or other Christian mission programs which was later taken up by the federal government have similar tactics, programs, and histories. Haudenosaunee communities, which are crossed by the US/Canadian border, are imbricated in both systems.

framework, is the submissive and forgiving Indian. The onus of healing and 'moving on', as in all Canadian reconciliation dynamics, are placed on the Indigenous communities themselves (Coulthard 2014), and more often, on Indigenous women (Million 2009). Institutionalizing healing as a part of building Indigenous futures insists that the so-called traumatized Indian leave the past behind. It denies the importance of rage, resentment, and vengeance, or a deep politic of Indigenous care and kinship, to the creation of Indigenous futures.

For Haudenosaunee people, perhaps, wasteland is a barren promise and deceit. Wasteland is the invocation of occupation. The productive violence of making land into *waste* in post-Revolutionary United States colonialism was an attempt to deaden the land and to deaden the people who lived on it, and cut them off from each other. The pathologies of modern psycho-social frameworks, when applied to a peoples whose key struggle is to regenerate relationships and responsibilities to homelands, leave these wastelands to eat away at the bodies of the Indigenous peoples they aim to heal. The barren promise remains. In a logic in which homeland, as it is for Abadian, is conscribed to a frame of mind, no material lands and need be returned. The relationship between our bodies, our governing bodies, and our lands was never extinguished, as much of this dissertation will show, though the forces of US colonialism have attempted to do so at every angle. Regenerating practices of kinship and governance, attends to these dismemberments of wastelanding. Despite, as Haudenosaunee scholar Susan Hill writes, the need to move and make new homes and homelands, "the places where [our] ancestors walked in the past continue to have an effect on [our] lives in the present" (2017, 41). Addressing and condoling the grief of colonialism is a spatial practice of regenerating homelands.

1 Land

> *"Given the longstanding, distinctly non-Indian character of the area…we hold that the Tribe cannot unilaterally revive its ancient sovereignty, in whole or in part, over the parcels at issue. The Oneidas long ago relinquished the reins of government and cannot regain them through open-market purchases from current titleholders."* – Justice Ruth Bader Ginsburg in the opinion in US Supreme Court case, *City of Sherrill V. Oneida Indian Nation of N.Y.,* 2005.

Tsi tkaristì:seron

- Kanien'kehá:ka (Mohawk language) word for *border*. Translated literally, "where the metal has been dragged."

In March of 2005, the US Supreme Court made a decision that shook the Oneida peoples, rippled through Indian Country, and vexed Indian Law experts. In an 8-1 ruling against the Oneida Indian Nation of New York, the Court decided that the Oneida Indian Nation of New York (ONNY) could not expand its sovereign right to tax-exemption onto land that had been purchased by the ONNY in the late 1990s; land which had been illegally purchased from the Oneida in 1807. The peculiar and vague phrase coined by Justice Ginsburg in this 2005 case, "the distinctly non-Indian character of the area," has been redeployed as a legal rationale against other Native land claims across Indian country. While the "character of an area," region, or neighborhood, in legal discourse refers to the concept of customary use, Justice Ginsburg qualified the term with the racial referent "non-Indian," changing the meaning distinctly. A Euroamerican settler common sense understanding of the "non-Indian character of the area" undergirded the Court's assumptions about the finality of Oneida dispossession, and the nature of Oneida sovereignty, despite the vagueness of this term in the decision.

At the turn of the 18th century, surveyors and corporate and state officials who dealt in the first land markets of Western New York, a 6-million-acre tract of land that settlers called "Genesee Country," were unambiguous in their view of the character of "Indian land" or "non-Indian land." For the Haudenosaunee, the confederacy of six Native nations including the Oneida, often anglicized and mis-named the "Iroquois," this area refers to the Confederacy's western-most tribal homelands. Despite multiple violent acts of colonial displacement by the British American colonies and the United States government and military, new Haudenosaunee settlements, including multi-tribal sites, arose in this region next to older communities, maintaining and re-establishing relationships that made them Haudenosaunee places (Mt Pleasant, 2007). For post-Revolutionary, Euroamerican settlers however, the area between the eastern shore of Lake Erie and the Finger Lakes was imagined as the Western frontier of a growing empire. Promising fertile land, waterways for transport, and forest for timber mills, these lands were framed as a potential cornucopia for Euroamerican settlers, once the landscape would become ordered. Thomas Jefferson's natural historical arguments about the deficiency of Indians and superiority of Anglo-Saxon governance materialized in his research and development of the national "Towns

and Ranges" land survey system. When surveyor Joseph Ellicott put these units and tools into practice to make land into property to be governed as Western New York, Jefferson's land survey technique was his guiding principle. This chapter shows how anti-Indigenous racism animated the technopolitical strategies that etched Euroamerican settlement into the geographies of today's upstate New York around the turn of the 18th century, and how these racial figurations of land and livelihood are reanimated to enact new forms of violence and legal dispossession that Indigenous people today both reckon and refuse.

Critical legal and Indigenous studies scholarship on this 2005 court case has focused on Justice Ginsburg's anti-indigenous invocations of the Doctrine of Discovery, the doctrine of laches, and processual problems in the case (Borgman 2006; Braaten 2007; Duthu 2008; Matthews 2007; Rifkin 2009; Singer 2005; Sunderlin 2006; Wandres 2006). It is certainly vital to continue to question, for example, the validity of the 1831 Supreme Court decision *Johnson v. McIntosh*, which wrote the Doctrine of Discovery into federal law. The legal theory of right of occupancy of *Johnson* incorporates into standing US law an assumption of "the racial inferiority of Indian people" (Duthu 2008, 73). No analysis of the 2005 case yet interrogates the racial qualification of customary use held in the phrase "non-Indian character of the area." As an instantiation of settler common sense, the phrase "non-Indian character of the area" unveils spatial and temporal aspects of the colonial "modes of rationalization" (Moreton-Robinson 2015) about race and place that maintain anti-indigenous settler sovereign landscapes of property and right.

I have created the term *settler sovereign landscapes* to denote particular racial and spatial orderings of people and things that emerged in the half-century after the Revolutionary War. By demonstrating the co-production of settler landscapes and settler sovereignty, I confront the everyday concept that US American territorial sovereignty was built on *stolen land*. The maintenance of US settler sovereignty requires that commodified property in the form of land and labor is regarded as an object (Harris 1993), however recent scholarship on colonialism and property in relation to Indigeneity and Blackness avoids simplifying racialized dispossession to *theft* of either land or labor (King 2019; Dorries et al. 2019). I show how land's racialized abstraction transforms land into property in upstate New York as a nation-building project of whiteness that operates "in tandem through identity, institutions, and practices in everyday life" (Moreton-Robinson 2015, xix). I expand understandings of the specific way property was constructed as a *racialized* commodity form of land under settler colonialism (Pasternak 2017), reconfiguring relationships between land and people in space through particular anti-Indigenous conceptualizations of place and polities. This contributes to a growing subfield of Indigenous geography that engages critique from the standpoint of Indigenous practices of place and spatial knowledge (see De Leeuw and Hunt 2018). Starting from the Haudenosaunee perspective that land cannot be stolen because it is a relation and not an object, I also draw on Massey's (2005) analysis of space as relational and heterogenous to interpret the social and territorial practices that are continually put to work to maintain Indigenous dispossession, without false concession that Haudenosaunee relationships to their lands deemed 'stolen' have been broken.

Euroamerican settlers' practices of commodifying Indigenous homelands into land-as-property in Western New York was a process of settler colonial statecraft which overlaid, but did not extinguish, Haudenosaunee sovereignties (see Rickard 2011; Daigle

2016).[22] Haudenosaunee still maintain relationships with those lands not reducible to a rubric of commodified property. To maintain the objectification and commodification of land in US law, the Supreme Court in *Sherill* proclaimed that the ONNY may take back the land if they treat it as property in perpetuity, but that they cannot rearrange those relationships between land and people in line with their articulations of sovereignty. The genesis of these settler sovereign landscapes reveals how Euroamerican settlers' practices of turning Indigenous homelands into property linked government and racialized improvement of populations with the production of state territory.[23] US American territoriality and governance is structured on anti-indigeneity vis-à-vis hierarchical categories of difference that originated in Renaissance Europe's travel narratives (Trouillot 2003; Moreton-Robinson 2016). Land surveys produced land as abstract space and reordered relationships between land, its characteristics, and its people along these same colonizing hierarchies. Spatial grids and land systems are forms of disciplinary power as scholars within the field of geography have shown (Blomley 2003; Elden 2007). Scholarship on mapping has analyzed the survey process as property's escort that effected a new way to claim rights to land outside of customary claims. The land survey has been part of violent practices of dispossession (Blomley 2003; Edney 2009).

The survey of Genesee Country lands reimagined relations—between land, people, and other-than-humans such as trees, rivers, and animals—into settler colonial hierarchies, as the next section will show. These hierarchies of race and life animated the very units and tools used to measure the land into parcels of property. This chapter traces the genesis of those units and tools in order to contextualize the role of the land survey in making property out of these "frontier" lands west of the Proclamation Line and the Genesee River. Today, this rough geographic line also marks where New York is divided between the pre-Revolutionary British land parcelization system of Metes and Bounds, and an early version of the Townships and Ranges survey system that was first imagined by then-governor of Virginia, Thomas Jefferson, and later adopted in the 1785 Land Ordinance. The 1785 Land Ordinance in general and the survey system in particular were meant to bring 'order' and governability—including taxability—to the process of piecemeal land settlement by small land-owners, and assure that land companies would be able to profit from the process (Piasta-Mansfield 2012). The surveys also aided land companies and the US government in selling parcels which they had never visited. Pre-revolutionary colonies had used the system of Metes and Bounds, in which property had only been marked onto the land with rocks or trees, and property lines could be lost as forests grew over them or rivers meandered. Once surveyed in relation to the astronomical guidelines of meridians provided by transit devices and then marked and recorded in a surveyor's map, property lines would become verifiable in perpetuity (Ellicott et al. 1937, 83). The surveys allowed land to be abstracted into verifiable and thus heritable property.

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[22] Rickard (2011) provides a rich discussion of the use of the term "sovereignty" for describing specifically Haudenosaunee self-determinations and nationhoods. For an analysis of Indigenous ontologies and place-making in relation to concepts of self-determination and sovereignty, see Daigle (2016).

[23] Elden (2007) adds a corrective to Foucault's analysis of governmentality, showing that government of land has not been superseded through the devolution of European monarchical sovereignty. He notes how Jefferson's early work on the survey, which this chapter analyzes, is an under-studied source.

This chapter attends to the racial tenets and civilizational discourse that shaped the units, tools, and subjectivities formed through the practice of the first land survey of Western New York. The theories of racial difference that ordered the characteristics of territory used to compare Indian and non-Indian land and livelihoods at the turn of the 19th century—towns, infrastructure, agriculture, and forestation—has become settler common sense at the turn of the 21st (Rifkin 2013; see also Vizenor 1999). I demonstrate the construction of settler sovereign landscapes—a particular racial rendering of land and labor that organizes men and things in space ranked along a civilizational hierarchy—as key to territorial strategies of Euroamerican occupation and settlement in the US. I first analyze the techniques of law and land survey conceived by Thomas Jefferson that were soon put into practice specifically in Western New York. I then discuss how these techniques of property-making reconfigured relationships between land and people during post-Revolutionary dispossession and occupation of Haudenosaunee homelands in New York, known colloquially as the "Empire State." I conclude by examining how these practices continue to constitute settler geographies, meaningfully and materially, over and against Haudenosaunee sovereignties, producing landscapes in upstate New York that are entangled, contested, and at times incompatible.

Settler anxieties and producing the Indian body

Land survey techniques had been taken up with new vigor in Europe in the 1600s as a growing English gentry demanded the measure of landed property and enclosure of the commons. In settler colonial contexts, the practices and tools of land survey were co-constituted with new racial hierarchies that, while forged in the natural histories of European writers, took on particular and historically contingent valences in the new United States. The Revolutionary push to distinguish the US American individual and collective body from both the English and the Indian, as I will show, coalesced at the axis of land, labor, and governance. US American claims of authority to govern the space of the colonies without subordination to the Crown were often legitimated through Lockean claims of collective "improvement" to the lands and colonies, a borrowed English penchant (Rifkin 2013, 329) which took on particular racist meanings in this colonial context. It was through the survey and mapping of lands in colonial US America that the idea of improving the *land* became a metonym for a racial project carried out by a population of "improved" *people*: an ontological claim linking whiteness and settler sovereignty. The white, Euroamerican political subject and the spaces (s)he would occupy or govern was conjured in reference to multiple obverse yet related figures. Jefferson's racial theories of humanness figured people of African descent as unable to labor freely alongside white people. Among others, King's (2019) analytic of Black fungibility refutes the category of labor for its inability to encompass how Blackness is constitutive of concepts of *order* in US colonialism. *The Indian*, as a racial figure shaped partly through Jefferson's natural historical theories and attendant political techniques, though not reducible to the strictures of the laboring subject, was also co-constituted with Euroamerican concepts of labor and land. The US colonial project, as one of white possessiveness (Moreton-Robinson 2015), reconfigured and revised previous understandings of Indians as an agricultural peoples (see Banner 2005) to build new racial landscapes of rule. This section shows how Jefferson's racist figure of the Indian articulated concepts of body to place via racialized concepts of Indian labor, land, and governance.

The content of the US American claim to territory and governance merged a white laboring body with a particular kind of landscape—or rendering of land. This dynamic became manifest beginning in the mid 1780s, when then-governor Thomas Jefferson was tasked with developing a method by which lands west of Virginia would be divided and recorded in a new federally-managed public land office, at the same time he was writing his longest text, *Notes on the State of Virginia*. Jefferson was the key US American writer who attempted to translate the theoretical figure of the 'savage' from European philosophy into the living American Indian. In 1780, Thomas Jefferson received a set of questions about the new nation-state and the colony of Virginia, from the French delegate to the US, Francois Barbe-Marbois who had been ordered to collect data on the colonies. Despite the fact that the thirteen colonies were still in the midst of a war for independence from the British crown, Jefferson worked on this project in between escaping the British Army and fulfilling his duties as Governor of Virginia and devising the Towns and Ranges survey system. Within two years, Jefferson had a draft of what would become his book titled *Notes on the State of Virginia* sent to Barbe-Marbois. Jefferson edited and added to this text over the next three years, and a final version was published in 1785. He had organized Barbe-Marbois' jumble of questions into a set of twenty-three queries that make up the twenty-three chapters of the book. Barbe-Marbois' questions, however, were not the only focus of *Notes*. The book as a whole, particularly *Query VI,* was also a staunch and explicit defense against the arguments of Comte de Buffon's theories of Euroamerican settlers' racial degeneracy.

The Comte de Buffon was a French natural historian and Enlightenment writer who played a key role in forming the discourse and practice of scientific authority that codified the categories that organized social worlds in the 18th century. He had a prominent influence on pre-Darwinian concepts of heredity, race, biogeography, and the idea of struggles for survival more commonly referred today as 'survival of the fittest.' Buffon had expanded the work of the earlier Swedish natural historian Carl von Linneaus, with whom he was in vocal methodological contention, by composing a taxonomical project that specifically employed the signifiers *savagery* and *civilization* to place different geographically-based 'varieties' of people into a hierarchy. Buffon posited that this hierarchy was built not through the ordering of pre-determined and fixed types, but was rather based on a theory of human change after migration from a single origin point—Buffon preferring racial degeneration theories over those of racial improvement. Drawing on the work of various European explorers and voyagers, Buffon created a spatially organized, comparative schema in which he attempted to explain differences in the so-called intelligence, customs, and habits of various people around the world by linking these physical characteristics to climatic and environmental variation. Integrating hierarchical human difference with a biogeographical theory of change, Buffon incorporated an armchair study of kinship, breeding, and inheritance into the study of natural history in his early iteration of European scientific racism. In Buffon's framework, any European species of plant or animal who moved to the Americas would, generation by generation, degenerate to what Buffon saw as a weaker form of life. He all but insinuated that European people would also degenerate into what viewed as the same stage of savagery in which Indians

lived. This idea circulated around Europe[24] and threatened the appeal of the idea of the United States as a migration destination, a profitable investment for European land speculators, a trade partner, or the site of a legitimate foreign government.

In response to Buffon, Jefferson's text espoused an early Euroamerican settler science of race and place, which has been critically analyzed elsewhere as the origins of federal Indian removal policy.[25] I show that Jefferson's race thinking did not only affect Jacksonian policy ideas, but also informed the material practices of the land survey and property making in the United States. The debate between he and Buffon captured a central anxiety that was circulating in the US and European countries: would white Europeans racially degenerate into Indians if they lived long enough in North America? Fears of racial degeneracy, echoing the argument between degeneracy versus improvement that defined 'enlightenment' debates in Europe at the time, was framed variously. Would the bodies of Euroamericans succumb to the climate and degrade racially, or would the less virile environment make European agriculture and husbandry unfruitful in the Americas leading to racial degeneration? This anxiety,[26] already built on in an understanding of racial difference and inferiority of 'the Indian' was refracted by Buffon and Jefferson through pronatalist concerns about male virility, gender roles, and sexual desire. The majority of this debate in *Notes* is laid out in Query IV which is titled, "Productions Mineral, Vegetable, and Animal." Jefferson worked to defend and legitimate the emerging nation of the United States, and to prove not only that European settlers would not racially degenerate into Indians, but that Anglo-Saxons were the 'race' best-suited to settle the lands that would soon become the United States.

Jefferson quoted the biogeographical arguments that Buffon made about Native people and found contrary evidence to argue that Euromericans were not racially degenerating. Buffon's arguments about degeneracy hinged on a fixation on sexual desire and sexual reproduction. His arguments were based on an environmental and climatic theory of racial difference: he suggested that the people of the Americas have a lower level

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[24] Buffon was not the first or only European to propound his own version of American degeneracy theory, and others were much more explicit in their ideas about the human implications of biogeographical racial degeneracy. Swedish naturalist Pehr Kalm theorized in the mid-1700s that all species in the Americas had less 'stamina' than Swedish species. Dutch geographer Cornelius de Pauw published in 1771 that the American climate had degenerated the indigenous people, and would do so to European settlers as well. French writer Abbé Raynal thought European settlement in America risky, but suggested that the way Euroamericans had changed the landscape there could ameliorate any degenerative effects. See: Fleming, James Rodger. *Historical perspectives on climate change*. Oxford University Press, 2005.

[25] Keller (2000) shows that Indian removal policy, often attributed to Andrew Jackson (see Rogin 1991), was germinated in Jefferson's racial and spatial imperium of US territorial expansion.

[26] Sara Ahmed (2004) writes about anxiety and security in the context of racism: "[f]ear and anxiety create the very effect of "that which I am not,"…by establishing objects from which the subject, in fearing, can stand apart, objects that become "the not" from which the subject appears to flee" (127-128). She continues to clarify the productive nature of fear and anxiety in producing difference and boundaries in relation to concepts of safety and security of the self or the collective: "[s]ecurity is not simply about securing a border that already exists, nor is fear simply a fear of what we are not…anxiety and fear create the very effect of borders, and the very effect of that which "we are not,"" (132).

of virility due to, in part, dense forests and bad air. As with the majority of natural history writing at the time, the male of a species stood in as the measure of the entire species, and so his hypotheses focused particularly on comparing male virility between European-Americans and Indians. In the second volume of his 1766 *Histoire Naturelle*, Buffon wrote his analysis of the so-called "American savage:"

> *In the [American] savage, the organs of generation are small and feeble. He has no hair, no beard, no ardour for the female. Though nimbler than the European, because more accustomed to running, his strength is not so great. His sensations are less acute; and yet he is more timid and cowardly. He has no vivacity, no activity of mind. The activity of the body is not so much an exercise in spontaneous motion, as a necessary action produced by want…It is easy to discover the cause of the scattered life of savages, and of their estrangement from society. They have been refused the most precious spark of Nature's fire. They have no ardour for women, and, of course, no love of mankind…The bonds of the most intimate of all societies, that of the same family, are feeble; and one family has no attachment to another. Hence no union, no republic, no social state, can take place among the morality of their manners.* (Comte du Buffon, 1766: 464-465)

Buffon had argued that Indians lived "scattered" lives because they "lacked ardor for their female," and thus did not reproduce in great numbers. Other evidence Buffon includes to support his claims of the Indian male's lack of virility are reports of low population density, a supposition of timidity and cowardliness, and the lack of beards or other bodily hair on Indian men (Jefferson 1999, 61-62). Naturalizing Western models of family and gender roles as a biophysical ideal and transmuting it to the nation-state, Buffon suggested that because the "Indian" did not have strong love for family, that the Indian would also have no strong love for society, "hence no meeting, no republic, no social state." Without what he called *society*, he concluded that the Indian was not civilized. If Europeans were to degenerate into Indians, his argument suggested, there would be no society in which Europe could or should invest.

In response, Jefferson wrote point-by-point ripostes which may appear as a redemptive liberalism, and has been interpreted by some historians as a sign of Jefferson's care for Indians. He assured his readers that Indians are brave, faithful and strong in their relations to their women, children, and friends. Going beyond these more general claims of the virtue of Indians, he also crafted proto-ethnologic and corporeal evidence to rebuff Buffon. Jefferson argued that Indians are not less hairy, but in fact pluck their hairs as part of cultural practice. As proof, he cites the comments of white traders who have married Native women and urged them to stop plucking their hairs. On the question of sexual reproduction, he attributes the perceived lower number of children born per family not to a lack of virility, but to the "obstacles of want and hazard" that supposedly compel Native women to have fewer children than Euroamerican women (Jefferson 1999, 65). Making the assumption that Native people lived in desperate want due to lack of settled European-style agriculture, Jefferson's analysis misinterprets seasonal food-supply variation with famine. While Jefferson mentions that Indian women have access to medicines that can prevent or abort pregnancies, he interprets this as an act of necessity practiced by Indian

women so that they may hunt and feed themselves and their families during famines, rather than interpreting it as an agential choice on the part of Native women who may not want more children (Jefferson 1999, 64-65). Constructing a colonial agnosia that ignored the previous 150 years' recognition of Native agriculture and abundance of food, Jefferson dramatized seasonal variation of foods in his narrative of racial difference. From their equally patriarchal and pro-natalist perspectives, Buffon and Jefferson both biologize their moral judgements on supposedly "low" births rates: the former through racialized environmental determinism, and the latter through a racial stagist argument.

These biologically inflected anxieties about male virility were entangled with assumptions about good governance and population growth forged in European systems of feudalism. Pronatalism was a feature of European mercantilist policy that arose in the 17th century, when the concept of a *population* entered popular discourse. In this era, a larger population was equated with greater national strength and a richer monarch. During the 18th century, pronatalist discourse was enrolled in moral judgements about good governance in the writings of Montesquieu, Rousseau, and Benjamin Franklin in the American colonies. A large population became ideologically linked to "the health of the political body."[27] The debate between Buffon and Jefferson is written within the discursive constraints of these assumptions. Jefferson rejects Raynal's and Buffon's theories that the environment of the Americas was infertile or inferior, which would possibly lead to a degeneration of European male's virility, and therefore to bad governance and a weak state. In order to make an argument that redeems Euroamerican settler men's virility, Jefferson renarrates the causality of supposed low reproduction of Indian people. He claimed that it lies not the racializing effects of environmental factors, but due to their place on a civilization ladder that he has read off of their musculature, the hairs on their bodies, and their 'social and cultural practices', as later scholars would refer to them.

Jefferson was writing at a time before more explicit biological racism arose soon after Darwin's theories were published in the 1850s and 60s. The concept of race was, as it continues to be, a mutable one. Jefferson's figure of the "Indian" had all the biological and intellectual *potential* as his figure of a "European" or an Anglo-Saxon as he called them, though he argued that these potentials were not yet realized in the Indian. Jefferson had fashioned a model of Indians that put them biologically on par with "Homo sapiens Europæus," explicitly using the Linnean taxonomical name.[28] What I argue here is that what appears in some passages in *Notes* as esteem towards Indians is in fact a defense of Euroamerican settler male virility, the fertility and strength of the American environment, and the future of the new American republic. Jefferson's seeming redemption of the Indian is in fact a racialized redemption of white settlement in the Americas. Like other natural historians and earlier Enlightenment thinkers, Jefferson built a figuration of *the savage* as the primitive alter-ego of the West as "evidence within a debate" about the very possibility for a modern liberal state to exist in the so-called New World.[29]

Thus, while Jefferson claimed that Indians had the same physiological claim to

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[27] French cleric and geographer John-Joseph Expilly in a 1768 statement (in Togman 2019, 80)
[28] Jefferson, 1999 [1785]. Pg.66.
[29] See Trouillot 2003, 34.

humanity as white people,[30] he postured that Anglo-Saxon lifeways and governmental practices were superior, and civilizationally "advanced," to those of the Indians (Williams Jr., 2012). He offered conjectural 'proof' that European food production is abundant, while that of Indians is scarce: "Where food is regularly supplied, a single farm will shew [sic] more of cattle, than a whole country of forests can of buffaloes" (Jefferson, 1999: 65). For Jefferson, Indians "lived principally on the spontaneous productions of nature" and did not partake in agricultural practices to create tradeable stock (Jefferson, 1999: 101). Jefferson's ideas of Indian livelihoods put Lockean concepts of labor[31] to work in order to revise earlier colonists' understanding of Native agricultural abundance. Focusing particularly the role of labor in mediating the relationship between land and bodies to create property, Jefferson made the argument that Indians were developmentally incapable of productive labor on the land beyond "drudgery" or "mere survival" (Jefferson 1999). Adapting a stagist racial hierarchy from Scottish enlightenment philosophers (Williams Jr. 2012), he argued that without producing excess goods and requisite markets and trade, no society with systemic government had arisen among the Indians, and thus no nation or national territory. In practice, these anti-Indigenous racist theorems of labor left Indians 'free' but in the sense

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[30] See Frankel (2001) for a discussion of how Jefferson's seemingly redemptive theorems of Indians as a 'race' were in fact the basis of Jackson's violent Indian Policies of removal.

[31]Locke's writing only became popular when colonial Anglo-Americans aimed to seek independence (Anderson 2007), when the *Second Treatise* (Locke 1690) alone was published at this time in the Americas. While Banner (2005) has noted that Locke's treatises were largely theoretical and divorced from his experiences in the Carolinas where Indian land was recognized as both cultivated and as a form of Indian property, how Locke's texts were taken up in the late 1700s and early 1800s, leading up to the retrenchment of the Doctrine of Discovery in 1823, is not treated significantly in Banner's book. Locke's text backed precise colonial imperatives, namely black slavery and indigenous land seizure, under the guise of natural and greater good. The collective body, society, Locke argued had the right to manage life, and exclude any threats to it including those who had no reason. Locke (1690) asserts that there is no inherent right to property in humans except that earned through labor, and he constructs figurations of savagery and geography in America in order to contain his theory on civil society. For Locke, who had only visited what we call now the coastal Carolinas, "in the beginning, all the world was America" (Locke 1690, 125). He condenses all people living in the space of what he calls America as "Indians"—a type of people that, in his racio-techological schema, had not yet developed beyond hunting and gathering or subsistence agriculture. Without yet having improved the land through European-style agriculture, or produced an excess enough to warrant commerce, Locke claimed, the Indian race could not claim any natural or legal property rights: history had not yet delivered them to this stage of reason to know the law of natural freedom and live in a true, ordered society. Elsewhere in *Two Treatises*, Locke describes the stage in which a person could knowingly consent to laws of nature such as freedom in the language of childhood development: reason and therefore freedom are co-products of discernment gained with age and proper training. Uday Mehta (1990) finds that Locke's descriptions of the educational training of children, both in *Two Treatises* and other texts, contain a Euro-centric 'anthropological minimum' that is at the core of Lockean liberalism. Indians, in Locke's *Two Treatises*, are placed spatially and temporally outside of civil society and reason, and therefore outside of natural freedom. As such, Locke figures the "Indian" as both proof of the primitive origin of freedom and also as the negation of the ideal Anglo-Saxon liberal subject of civilized society. State racism takes form as a constitutive aspect of the modern secular state in and through the colony (Stoler 2002, Goldberg 2002), and more specifically, through a racist image of the Indian.

that once 'freed' from their land—i.e. dispossessed—Indians were 'free' to sell their labor on the market. Under the legal rubric of preemption rights and the extra-legal violence and ruthlessness of dispossession, Indians remained unfree to keep or sell land-as-property fairly on the market. This definition of freedom conscripted Native people and polities into the Euroamerican settler framework of law and property. Jefferson's seemingly redemptive welcome of *the Indian* into his 'humanity' naturalized Euroamerican colonization in law, eclipsed the violence of settler occupations, and disavowed Indigenous governance and claims to land. Jefferson's racist figure of the Indian articulated concepts of body to place via racialized concepts of Indian labor, sexuality, and land.

Men, measures, and polities

Jefferson's vision for the United States, or his "Anglo-Saxon dream" as Horsman (1981, 22) describes it, was rooted in his promotion of the racial myth of white Anglo-Saxonism. He claimed that his esteemed democracy and independent agrarian familialism was rooted in Saxon practices that had survived the Norman conquest of the 1000's despite the imposition of monarchal and feudal systems (Horsman 1981). Foreshadowing what would eventually be called *manifest destiny* in the 1840s, Jefferson believed US American colonization to be a natural historical trend maintaining the territorial expansion of Anglo-Saxons—a supposedly superior racial group of people—that would result in the natural disappearance of *the Indian*.[32] Jefferson crafted a concept of race that eclipsed real violence, as evinced in his support of the doctrine of discovery and his policies for Indian removal, and also offered a "counter-narrative, embraced by those contesting sovereign notions of power and right" (Stoler 1995, 68). The Anglo-Saxon settler in US America was both superior to the European who lived under a condition of "too much law" and to those who lived under, "no law, as among the savage Americans," Jefferson suggested referring to Indians (Jefferson 1999, 100). He framed his counter-narrative as a moral imperative and historical destiny linked to reaching a white societal utopia. This section describes how, beyond a mere racial counter-*narrative* as described above, Jefferson aimed to pave the way for the US American nation's diffusion of power through calculable techniques rooted in his racial theorems.

Particular to Jefferson's circumstances was his practical experience with land survey and his influence shaping early US American practices of governance and territoriality. Thomas Jefferson's father, Peter Jefferson, was a wealthy surveyor in Virginia, where he was employed mapping the borders of states, land grants, and plantations, and as a county court magistrate. With the leverage of his father's political connections, Thomas Jefferson launched his own military, legal, political, and scientific career. When he formulated his scientific spatial division of land which he claimed was based on natural law, he did so through a racial agrarian imaginary that was linked to a system of governance. Writing to an English political reformer later in 1824, Jefferson explicitly laid out the Anglo-Saxon racial counter-narrative that animated his earlier plans for Virginia and the Western states, where he had been Governor. The division of the land into counties measuring six square miles, aligning with "the hundreds of your Saxon Alfred"—referring to Alfred the Great, king of the Saxons in the 800s CE—was the basis

[32] The earliest writing in which he lays out these theories is in a 1774 pamphlet titled, "A Summary View of the Rights of British America" (Jefferson 1774).

of measurement that would organize local agrarian life and representative government. He imagined each township as "a small republic within itself," containing a school, a militia, police, infrastructure, and a location for local elections (Thomas Jefferson to John Cartwright, 1824). Jefferson called the township, "this most admirable of human contrivances in government" (in Pattison 1957, 46). For Jefferson, this emerging Anglo-Saxon system of material and social reproduction and governance began with the survey of colonized lands.

Jefferson spent years researching and devising a survey system, hoping that, "the globe of the earth itself…would furnish an invariable measure" (in Pattison 1957, 49). He sought to standardize the measure of an acre following the ancient farming practices of Anglo-Saxons, appealing to the idea that the colonization of the United States was racial destiny. Dividing the country's land by the "Anglo-Saxon acre," was thus not only reasoned for its numerical neatness—divisions by four and by decimals. It was also a political choice sparked by settler imaginary of racial superiority and belief in natural law. He eventually chose the Gunter's Chain: an English tool for measurement devised in 1624 to restore Saxon measures. Edmund Gunter (1581-1626) was a church Rector in London, and prominent mathematician and astronomer of Welsch descent known for creating various practical mathematical tools for land measure and sea faring.[33] The Gunter's Chain device, pictured below in Figure 1, was easy to transport long distances of roadless and forested terrain surveyors traveled. Its many links were flexible and compact; it could be easily packed or thrown over a shoulder, and would not stretch or shrink as ropes tended to do. Measuring 66 feet long, equaling 22 yards or 4 rods, each chain has 100 links. There are 10 square chains to the acre, 80 chains to the mile, and 640 acres to the square mile. Four rods equaled one day's worth of agricultural work, and forty days of work constituted one acre. The measure of a rod was based on the amount of land that was commonly plowed in one day by two oxen pulling a wooden plow (Pattison 1957). Centering a white agrarian imaginary of livelihood and labor, the wooden plow implies the formation of a subject who masters both the tool through his productive labor, and who masters the land which *he* plows. The spatial project of creating colonial land as property and governance—or settler sovereign landscapes—was constituted through the figure of the Anglo-American yeoman. This Anglo-American schema of improvement was created in contradistinction to both the referent of the European plowman as the humble worker, and the referent of the Indian as the noble, yet disappearing, host. The figure of the plowman is advanced to the position of property-owner once a line is drawn around his territory. Euroamerican modes of production brought into being by the figure of a white Euroamerican plowman thus form the sublimated elements of commodified land-as-property in the US, replaced by the mark of an acre on the ground or on a map.

[33] The Gunter's navigational scale, often called a "Gunter" by sailors, was used by many navigators including the British Royal Navy from the 1600s until the 1840s. This is inclusive of the many Royal Navy ships that were integral to the functioning of Black slavery: the triangular trade including the middle passage.



Image 1: Image of a Gunter's Chain, Division of Medicine and Science, National Museum of American History, Smithsonian Institution

These land measurement standards were also a deliberate move towards constructing a national state space for independent Anglo-Saxon government. The Townships and Ranges survey system was first put into practice by Thomas Hutchins in his 1785 survey of the Seven Ranges, after the 1785 Land Ordinance went into effect. Andrew Ellicott, brother of lead surveyor of Western New York Joseph Ellicott, was a surveyor on the Seven Ranges Survey. In 1791, Andrew Ellicott was hired by Jefferson to survey the new federal city of Washington, DC. Jefferson directed that the US meridian be set running directly through the Capitol Building, symbolically linking the survey and measurement of land for property to the governing center of the new nation-state. Like Jefferson, Andrew Ellicott was eager to distinguish US American cartographic baselines from those established in the UK. In an April 1801 letter to Jefferson, Andrew Ellicott discussed the distance of Washington DC from the increasingly standard Greenwich meridian line. He commented, "I have long been wanting our longitudes to be reckoned, or counted, from our own Capitol, and not from a place within another country…We appear yet to be connected to Great Britain by a number of small ligaments, which tho [sic] apparently unimportant, are nevertheless a drawback upon that absolute independence we ought as a nation to maintain" (in Kovarsky 2014, 101). The making of settler sovereign landscapes was a racialized project that imbricated standardization of measure as a central aspect of statecraft, was thus far more than a class struggle (see Scott 1998), and was central to constructing enduring geographies of occupation.

Land survey as a technique for commodifying land and state-formation was

preceded by other legal and technopolitical strategies of Haudenosaunee removal in upstate New York. The first Euroamerican claims to the land, made by the Commonwealth of Massachusetts through the British Crown's colonial charters, rested on the Doctrine of Discovery (Chazanof 1970). Confirmed in a Papal Bull of 1493, the Doctrine of Discovery claimed that Christians could justly kill, and seize land from, any people who were not subjects of a Christian monarch. King James I had granted the Plymouth Company title to a stretch of land including today's Western New York that reached from sea to sea in 1620. Title was then transferred to the Massachusetts Bay Colony in 1628 (Chazanof 1970), and the Massachusetts Bay Colony would eventually collect the monies made when this land was sold to the Holland Land Company in the late 1700s and then registered as part of New York state. This form of Indigenous dispossession via racialized "just war" enabled in law by the Doctrine of Discovery was declared US policy by Thomas Jefferson in 1792, and was retroactively codified into federal law in the 1823 US Supreme Court case *Johnson v M'Intosh*.[34] The Euroamerican imaginary of ownership indicated by colonial land charters—of thousands of miles of valleys and plains and steppes and mountains never inhabited or even passed through by the people who claimed them as property—was a mere textual formality until after the Revolutionary War. After the war left them unhindered by the British Crown, land companies and other speculators and settlers pushed passed the 1763 Proclamation Line, which ran through the middle of what is today's New York State.[35] The 1768 Treaty of Fort Stanwix, made between the Haudenosaunee among other Native groups and the British Crown, also guaranteed that these lands would not be encroached upon by Euroamerican settlers or governance. As the map in Figure 1 below shows, the 1763 Royal Proclamation Line and the 1768 Treaty of Fort Stanwix boundaries roughly mapped onto each other. The two three lakes beneath Lake Ontario in the map are today's Keuka Lake, Seneca Lake, and Cayuga Lake, which lie squarely in the middle of New York State. In 1788 the Holland Land Company, a consortium of six Dutch investors, purchased *preemption rights* to "Genesee Country" lands west of the Proclamation Line from Philadelphia senator and financier Robert Morris. Preemption rights—the right to be the first person in line to purchase land from Native people when or if they offered it for sale—constituted a large portion of early US American land markets.

[34] In 1823, this kind of land claim retroactively became law of the land, with the US Supreme Court's *Johnson v. M'Intosh* decision to uphold the Doctrine of Discovery in regard to the original thirteen colonies and their claims to the land stretching between the Atlantic to the Pacific. This law is still upheld in courts today, including *City of Sherrill vs. Oneida Indian Nation*.

[35] The concept of settlement has a long history entangled with racial concepts of social development that placed white Euroamerican capitalist agriculture and settlement at an evolutionary apex. I confront these very racial concepts in this chapter, and generally delineate Euroamerican settlement from indigenous villages and towns by using the blanket modifier "Euroamerican." Generally, this refers, in both my text and the historical texts I quote, less to a collection of physical towns than a general concept of settlement.

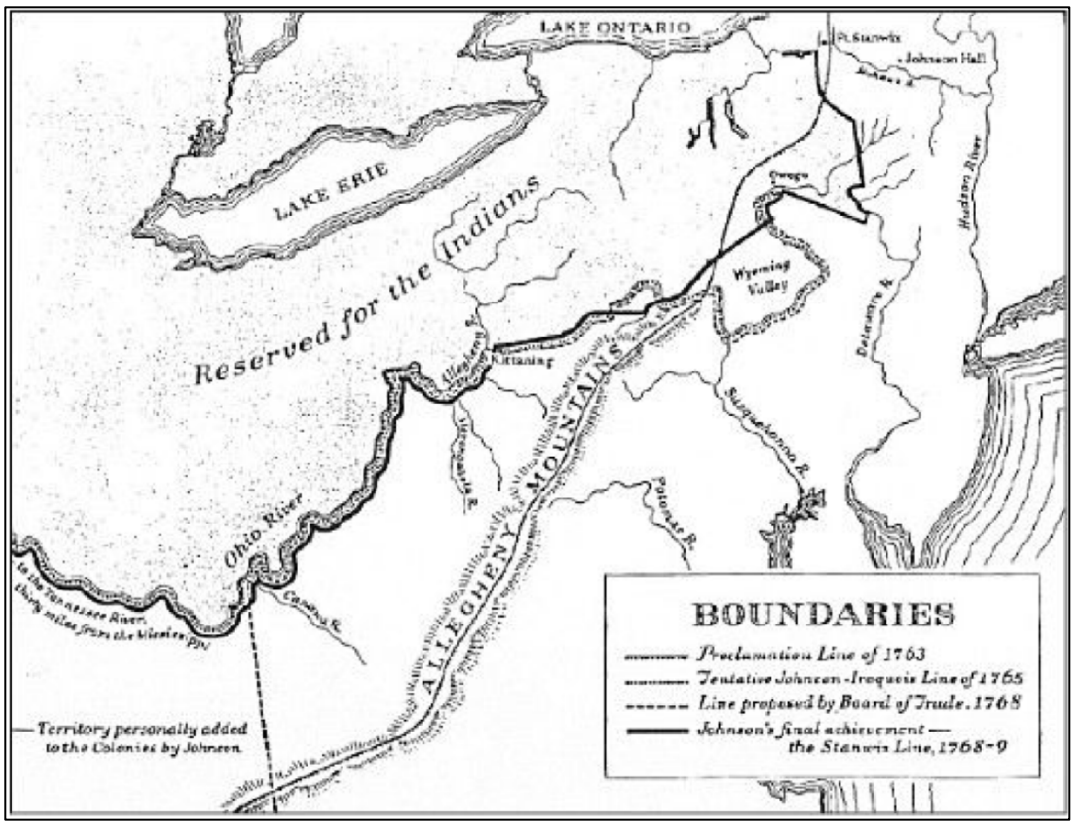


Image 2: Map of 1763 Royal Proclamation and 1768 Fort Stanwix boundaries.[36]

Preemption rights are a largely understudied legal construction, though it was a tenet of the Doctrine of Discovery and a key technology of Indigenous land dispossession both before and after US American independence. The right of preemption, at the time, aided the legal construction of a tentative settler sovereignty legally founded on the subordination of Indigenous jurisdiction (see Ford 2010). Enacting the state's *imperium*, preemption rights centered European discourses of land-as-property in Haudenosaunee lands before dispossession or acquisition of that land even occurred, suspending Haudenosaunee practices and governance and placing the onus of defending their land from Euroamerican ruthlessness and violence on Haudenosaunee people (Piasta-Mansfield 2012; Pasternak 2017). In practice, preemption rights were treated by investors as little more than a legal hoop to jump through. Morris sold his Genesee Country preemption rights to the Holland Land Company under the agreement that he would only be paid by the Company when all Indian title was extinguished. In order for Morris or the Company to gain a return on their land deal, the Haudenosaunee could not continue to live on their homelands (Goldstein 2008). Morris and other agents of the land company and local politicians misappropriated Indian title away from the Haudenosaunee through various tactics including bribery, threats, exploiting existing animosities between Haudenosaunee leaders, and convincing Haudenosaunee people that if they did not sell land to the Holland Land Company that squatters and other companies would take their land for less or no

[36] *From Hill (2017: 126).*

money at all (Hauptman 2001).[37] These fears were not entirely unfounded. In 1773, one British trader approximated that over 60 thousand white settlers were already illegally settled West of the 1768 Treaty of Fort Stanwix boundary (see Figure 1) in Haudenosaunee country alone (Hill 2017). The legal construction of preemption rights made returns on investments in Indian land, such as the Company's, tenable by legally defining Indians as occupants, rather than owners.

These tactics of dispossession did not go unchallenged. When councils and treaty signings took place, often entire portions of a Haudenosaunee community would travel and stay at the site of the council, including women, children, and elders. In a 1796 council between the Seneca and US fort commander Captain James Bruff, the latter requested to widen a road running through Seneca lands. In one small example of generations of challenges to Euroamerican settlement, the Seneca women who took part in the council had Honayawas, a controversial Seneca sachem and orator, share their decisions with the audience. Honayawas noted that, "the Land and the warriors belong to [the women]," and that they named Morris, "the Great Eater devouring their Lands."[38] Seneca women, asserting their jurisdiction over the lands, requested during this council that the US federal government deny Morris the right to obtain Indian Title. The following year, the clan mother's jurisdiction over land governance was circumvented during the signing of the Treaty of Big Tree, in which the warrior chiefs who were supposed to answer to the women signed away over 3.5 million acres of land.[39] Only the words of *men* were understood by US government and land company agents to represent the word of the people, inscribing into Euroamerican settler processes of making land-into property a patriarchal domestic order. In this way, gender relations within Haudenosaunee law and governance were also reconfigured at this definitive moment in response to the pressures and expectations of Euroamerican settlers.

The next section discusses how the concept of taming or "improving" the land through labor, carried out by an "improved people," was a key feature of white Euroamerican settler selfhood and governance. It was formed precisely through racist contradistinctions to valuations of labor, livelihood, and polities of *the Indian*. The land survey linked the composition of landed property to particular spatial practices, forms of social reproduction, and human and non-human interactions, all categorized through racial

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[37] Hauptman's (2001) book, *Conspiracy of Interests: Iroquois Dispossession and the Rise of New York State,* makes an argument for the central role of politicians, missionaries, and businessmen who profited from the settlement of Western New York. Hauptman's narrative prioritizes interests, particularly financial interests, in a way that overlooks the racial constructions of dispossession, which my work illustrates. Goldstein (2008) writes of the way in which state interests trumped federal edicts in the rapid and aggressive dispossession of the Haudenosaunee between the years 1775 and 1842. Goldstein's article provides an excellent analysis of how local, state, and federal interests have played out in the 1900s as Haudenosaunee have challenged the legality of these land claims and sales.

[38] Ganter, Ed., 2006, pg.79. Honayawas is commonly known in English as Red Jacket.

[39] It is difficult to parse through centuries of misinterpretations of women's roles in Haudenosaunee life, compounded by the presence of adapted patriarchies within Haudenosaunee communities and lives today. From early 1600s Jesuit accounts to 1900s anthropologists, interpretations of Haudenosaunee genders and gender relations were refracted, remarkably incorrectly, through European and Euroamerican lenses (Horn-Miller 2016).

taxonomies and inscribed into the very units and tools that define that property in perpetuity. The Anglo-Saxon acre was neatly divisible into the mile, and six-square miles measured a town as a unit of governance. US government practices then took their "place" within these measurements. In the revolutionary discourse against British rule, Euroamerican settlers imagined a property-based nation-state devoid of sovereign Indigenous territoriality.

Rendering settler sovereign landscapes

Eighteen years after the Sullivan Campaign, in which President Washington ordered the US Army to slaughter, starve, and chase the Haudenosaunee out of their homelands in today's upstate New York,[40] the next invasion traded rifles and torches for Gunter's Chains, compasses, and the zenith telescope for astronomical measurement tracing parallels of latitude. The process of surveying Genesee country employed the labor of a team of 150 men trained by Joseph Ellicott and took two years between 1797 and 1800 to complete. The land survey was undertaken to bring order to the process of land sales and colonial settlement. While the map and measures that Ellicott produced from this survey was the central objective, the survey process and subsequent development and sales relating to the Holland Land Company's purchase were key aspects of constructing settler sovereign landscapes in Haudenosaunee homelands. This section demonstrates how agents of the Company, agrarian settlers, and other colonial actors drew on a particular ontological and anti-Indigenous racial ordering of people and polities as they made landed property out of Haudenosaunee homelands.

When Joseph Ellicott was hired by the Holland Land Company in 1797, his first assignment was to draw out the demarcations of reserved Indian land. No lands could be marketed as property without first bounding Haudenosaunee peoples in abstract space. In other words, the production of abstract space through the calculative techniques of the land survey aspired to homogenize a white settler governable space, differentiated over and against a racialized Haudenosaunee space. Land company agents' use of the Gunter's Chain to demarcate and enclose "Indian Land" is marked linguistically as a historically and spatially consequential act. As I shared this dissertation chapter with various friends and acquaintances in Haudenosaunee country, one friend, who is a Mohawk language teacher messaged me excitedly.[41] "*Tsi tkaristì:seron* is the Kanien'kehá:ka (Mohawk language) word for border," she wrote to me, and she told me that it translates literally to "where the metal has been dragged." She double-checked with other language speakers, and got back to me to clarify, that this was the term used for 'border' in the Western sense of the word. *Tsi tkaristì:seron* refers back to the Gunter's Chain's metal rods, as they were dragged across the tree-cleared land to create boundaries around heritable property and Indian Land.

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[40] The extent of the violence of this burn-and-pillage campaign against Native people including elders, babies, women, and their homelands, does not need to be detailed again here. Succinct correctives to a largely celebratory historiography of this campaign is found in the pages of Calloway's (2018, 244-259) *The Indian World of George Washington,* and in Mt Pleasant (2007).

[41] Yakotennikonhrare Gabrielle Doreen first brought this to my attention, and Katsenhaiénton Lazare remembered the word and gave permission to share it with me in this research, and provided additional background on the word's relation to the surveyor's chains used in the 1700-1800s.

In Iroquoian languages, my friend clarified, spatial designations most akin to borders would be described as the "edge" of something. For example, what translates from multiple Iroquoian languages into *wood's edge* represents the space that lies beyond a village's longhouses and garden fields. The edge of the woods was and is a multiply symbolic space, where, for example, men returning from war or from hunting would be met to redirect their minds into community life, or where outsiders would wait to be met and possibly invited in (Hill 2017). A mobile Haudenosaunee spatial practice was cut through by the imposition of borders and static boundaries. The Gunter's Chain was central to the process of making land into property at this historical moment, and the chain itself became part of Kanien'kehá:ka to describe this new spatial relation.

In a July 25, 1797 letter from Cazenove to Ellicott, Cazenove instructed Ellicott to give information and advice to the company regarding "the main object of the mission of the Holland Compy. Agents; Viz. to obtain the Indian title of the greatest quantity of the best lands belonging to the Holland Compy [sic]" (Ellicott et al., 1937: 4). Gaining title from the Haudenosaunee was the company's first priority because their purchase from Robert Morris only guaranteed the preemption rights, not land title. Appealing to the idea that Indians could not hold property, Ellicott, upon completion of the survey, wrote that, the whole of the Land "belonging" to the Company…was "liberated from Indian Claim" (Ellicott et al., 1937: 14). Haudenosaunee across New York State managed to reserve 189,920 square acres of land within the Morris Purchase for themselves[42], though in the words of Cazenove, this was only land to which, "Morris had not *yet* furnished the Indian title" (Cazenove, undated). Company agents began the survey only three months after the contested and corrupt 1797 Treaty of Big Tree secured Indian Title. Investing significant capital in the purchase of preemption rights was risky but was ultimately seen as a worthy investment by foreign financiers. The specious notion that the Haudenosaunee would certainly sell their rights to the land was presumed inevitable by Company proprietors.

Ellicott's next assignments for the Company were twofold. First, he was tasked with confirming the exact acreage of the Morris Purchase, estimated at 3.3 million acres, to assure the Company's proprietors did not overpay Morris. Second, Ellicott was to lay out ranges and townships according to Jefferson's method in order that the Company map could be constructed, and land parcels sold. Experienced surveyors, including Joseph Ellicott and his brother Andrew, Simeon De Witt, and other less-known men comprised a small part of the work team. Most of the team was Gunter's chainmen, draftsmen, boatmen and packhorse men, camp-keepers, and axemen. Of the approximately 150 men hired each year of the survey, over twenty were axemen hired to fell trees along the way. To set the astronomical line of the meridian with his zenith telescope, a surveyor needed a clear view of the sky, straight in front of him. In the words of Ellicott, trees "stood in the way of the Instrument" (Ellicott et al. 1937, 99), and a line approximately five feet wide and over 92 miles long was clear-cut. Additional trees were felled along the latitudinal and longitudinal

[42] In Ellicott's report to the Holland Land Company of 25 September 1798, he indicates that Haudenosaunee did not give in quickly or easily to the surveyors' desires: "here I cannot help adding the plague, double, and vexation I have had with these people is inconceivable. Any one of the unlocated reservations to get them fixed was nearly as much plague and Vexation as the effecting the first purchase and this one at Tannawanta more than all the rest." (Ellicott et al. 1937, 54).

lines of townships and ranges in a process Ellicott called "opening the lines" (Ellicott et al. 1937, 36). The land survey both ushered in deforestation by parceling land for sale to Euroamerican agriculturalists, and also necessitated felling trees and clearing forests for its realization.

Through the 18th century, "the forest" in Euroamerican settler discourse had become a metonym for a wilderness that was both savage and unhealthy. Settlers' lack of local medicinal knowledge, lack of knowledge of the location of drained lands, and insistence on settling in one location rather than cycling through settlements to let them regenerate, often resulted in high rates of illness. Clearing forests was a primary aspect of taming and "improving" a so-called wilderness. Even before Jefferson articulated his racist geographical schemas, early colonists defended the character of new settlements from European theories of climate-induced racial degeneration by arguing that their work deforesting the landscape had altered the climate to a more "ideal state" for a Euroamerican population. It was widely considered that "a country, in a state of nature, covered in trees" would produce a lower race of people, as Euroamerican physician and politician Hugh Williamson wrote in the 1770s, but that as forest was cleared America would become, "a proper nursery of genius, learning, industry, and liberal arts" (in Fleming 2005, 25). More than an intellectual exercise, technopolitical fixes to environmental questions of racial degeneration or civilization were part of public planning. For example, in a lecture to Philadelphia's American Philosophical Society in 1794, Irish physician Thomas Wright suggested that draining marshes was a way to make the country healthier: "let the surveyor general mark out a tract of say 100 or 200 miles in a right line to be cleared of trees; then every blast from these two opposite points will ventilate 200 miles of country, bearing along the fumes of all the marshes" (Wright 1799, 246). In Wright's estimation, common survey practices could help drain marshes and bring health to the settlers. The hard labor of clearing the forests to allow European cultivation styles in Genesee Country lands after their occupation did not solely fall on white yeoman. These land sales were advertised widely, and Euroamerican settlers from US Southern states migrated to New York, bringing with them enslaved Black people to clear forests, sometimes transplanting entire plantations onto dispossessed Haudenosaunee lands (Gerard-Little et al. 2016).

What had come to be called Geneva and White Springs had been the site of Seneca homes until approximately 1715, though Seneca visited and managed these lands as places to possibly return to until the Sullivan-Clinton genocide pushed them permanently west (Gerard-Little et al. 2016). There was a large party of Virginia and Maryland Euroamerican settlers who moved to Genesee Country at the beginning of the 1800s, a number of them moving to Geneva and nearby White Springs—likely to take advantage of existing clearings that had been upkept by Seneca people up until just 20 years prior—with up to 70 enslaved Black people who moved along with them. New York State had the largest number of slaves of any Northern US state above the Mason-Dixon line after the US Revolutionary War. In 1799 when the state passed the Gradual Emancipation Act, New York became the second-to-last Northern state to pass an emancipation law. Under this 1799 law, Black people born after July 4, 1799 would be emancipated only after working as indentured servants until 25 years of age if female, or 28 years of age if male (Gerard-

Little et al. 2016).[43] A second gradual emancipation law was passed in New York state in 1817, stating that on July 4th, 1827, all existing slaves in New York State could no longer be held as slaves. However, many Black people were still held as perpetual servants or in other forms of indenture, which often did not appear on any official documents as slavery (Harris 2004). For example, in the 1830 census three people of color were listed as part of the Rose Hill household in Geneva, most likely people held as domestic slaves or servants (Gerard-Little et al. 2016). Additionally, the threat of the *Kidnapping Club,* made up of white people who would capture free Black people in New York and sell them back into slavery in the South, most active in New York City, loomed over the lives of free and indentured Black people in the state (Harris 2004). Ellicott's survey of the Morris Purchase effected the clearing of the land itself, and also escorted in a racist system of production and property—of lands and of people—onto racialized lands

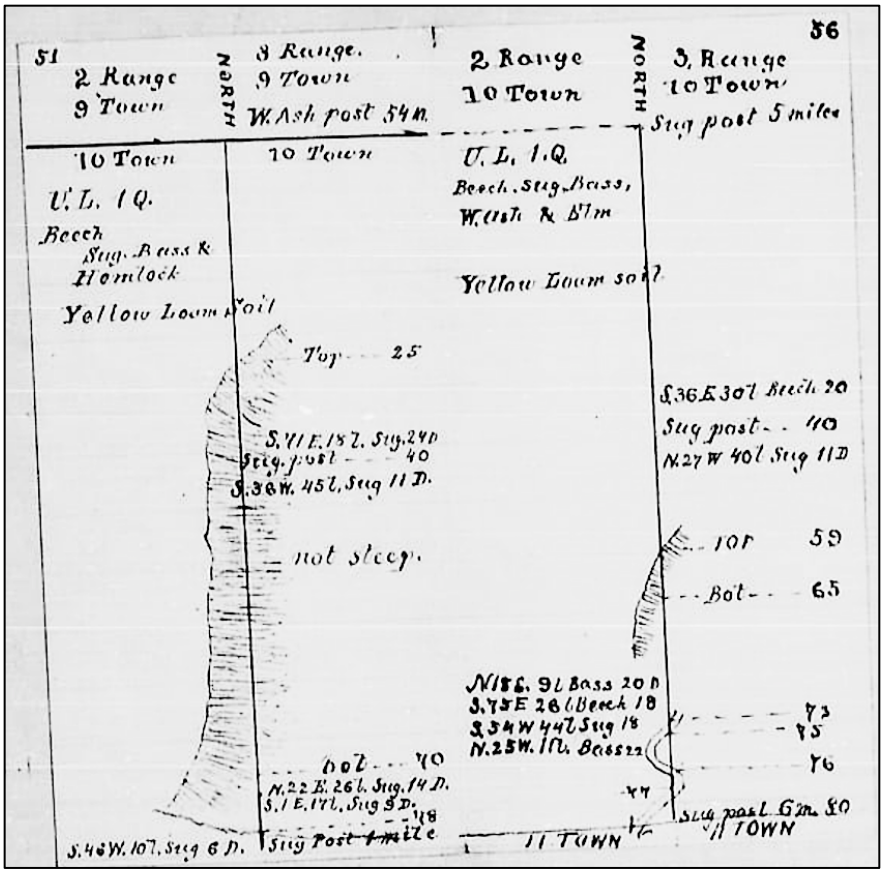


Image 3: Holland Land Company field notebook excerpt[44]

[43] Harris (2004) has detailed how slavery was entrenched deeply in the life and economies of New York City and nearby Hudson Valley. While surrounding states such as Massachusetts and Pennsylvania passed earlier gradual emancipation laws, New York state legislators made laws pertaining to ownership of people as slaves even more strict.

[44] (Reel 1, State University of New York at Fredonia Archives & Special Collections; Municipal Archives of Amsterdam; Nederlandse Document Reproductie B.V.)

When Ellicott used the Gunter's Chain to survey the Morris Purchase, he adhered to a standardized land measurement as much as he adhered to the ideologies behind those measures. Writing out his plans in accordance to directions from the Holland Company's primary agent, Theophile Cazenove, Ellicott aimed to subdivide the land, "into towns of six miles square, with a map of each town accompanied with field Books descriptive of land, waters, Mill seats, Plains, Valeys, [sic] mines minerals, etc" (in Chazanof 1970, 25). Surveyor's fieldnotes and reports that accompanied the maps during this era of Westward moving invasion of Native lands, were meant to be a methodical reportage of waterways, watersheds, forests, tree and plant species, cleared lands, and notably fertile lands. Notations of each six-square-mile patch, as seen in Figure 3 above, contained these notes. Hills and escarpments were sketched roughly into the fieldnotes, alongside notations about steepness and sometimes cultivability. Each surveyor on Ellicott's team would have a field notebook. With four columns per page, each page would describe a 12 by 12 mile section of the map: "2 Range, 9 Town; 3 Range, 9 Town; 2 Range, 10 Town; 3 Range, 10 Town." In the description, as shown in Figure 3 below, the surveyor has noted that there are beech trees and hemlocks in one square, yellow loam soil, and a mild escarpment which the surveyor as sketched in the page and has noted is "not steep." These features were documented in order to inform potential buyers who wished to transform them into the irrigation sources, fields, meadows, pastures, and roads that appeared as an ordered landscape to a Euroamerican gaze. Not only does the circulation of such maps of the "geo-body" produce a naturalized cartographic representation of a growing nation-state space (Winichakul 1997), but the very techniques of their production entailed a rendering of subjects and space: namely white Americans and property. These fieldnotes would be made available in Ellicott's office in Batavia, NY, for potential investors and yeoman to inspect.

Ellicott's final map depicts the land divided into six-mile squares of 16 and 15 columns, as seen below in Figure 4. The grid of the townships and ranges drawn across the depiction of land, representationally turning disorderly 'wilderness' of Indian land into disciplined white settler space. There are no Haudenosaunee place-names depicted on the map or written into the attending field notes. The words, "Holland Land Company Lands" stretch in an arc across the lands depicted on the map, in a visual depiction of ownership. The only trace of Native people existing in this abstracted representation of space is the demarcation of their reserved lands and an "Indian path." Marking off reserved Indian land with hard double dashed lines, the map invokes a sense of Native containment to the Euroamerican settler who would consult this map at a local land office before purchasing tracts. At the same time, this representation disciplines vision. Though concealing the subject position of its authors, the map shaped the spatio-subjectivities of its makers and viewers. Representing reserved Haudenosaunee lands as permanent and contained spaces outside of a commodified property order, the map implies a carceral geography—assuring land buyers that they would be safe from spatially incarcerated Indians—over and against a mobile Haudenosaunee spatial practice.



Image 4: Ellicott, J. "Map of Morris's Purchase or West Geneseo in New York State." 1801.

While the map constituted a containment and erasure of Haudenosaunee geographies in represented space, a racial figuration of the Indian was central to the construction of legal title to this land, and the allurement of Euroamerican people to the land. Company agents and US politicians wrote of the Morris Purchase as part of the edge of the Western "frontier" of the original thirteen colonies. The "frontier" is and was a material-semiotic of US colonialism: it is an abstraction that had real effects on spatial politics of Euroamerican settlement that transformed space and people of the "frontier," and politics on the east coast. The concept of the frontier in the US has always been constituted racially. Distinguishing political division of space from lawless space, references to frontiers create a "space of exception" for Native peoples, eliding questions of Native nationhood and sovereignty (Rifkin 2014). In other words, the fact that the geographical term used by Euroamerican settlers for space in which Native territory and US territory met was not "border," but rather specified as a "frontier," is a discursive signifier that Native political formations and their territorial claims were not regarded by colonial agents as legitimate or lasting. The frontier is marked as the limit between the known and the unknown, the settled and the wild, the ordered and the disordered, the natural and the social (Alonso 1995). That Western New York was generally understood by Euroamericans as a frontier signified violence and volatility to potential buyers, thus was a hindrance to Ellicott's task to sell land to speculators and a call for him to civilize

and tame the landscape.

However, the land survey alone was not what state officials, land company agents, and even the occupying yeomen thought would bring order to the landscape. As Ellicott brought the land survey to a close in 1800, he took a permanent position as primary agent for the Holland Land Company. He was tasked with selling plots and facilitating Euroamerican settlement on the lands while seated in Batavia, NY. He recognized that larger land buyers would not likely show interest in plots with no nearby transportation routes, stores, or mills, or which had not been cleared and built upon in a way that would immediately allow for the replication of English-style agricultural production and trade.[45] The area was also quickly becoming known for what was called "Genesee fever," as Euroamerican settlers reported coming down with a host of illnesses marked by fevers (Hauptman, 2001).[46] The material process of the survey physically shaped the landscape, but making this landscape into governable territory also included company-subsidized infrastructure that would allow Euroamerican labor and civil doings to bring "rational order" to the land. These settler sovereign landscapes not only figured Indians and their polities as anachronistic and dangerous, but also made aspects of their lifeways ecologically unfeasible. The small towns in upstate New York that emerged along the lines of the Company's land survey, measured in the "Anglo-Saxon acre," altered the ecosystem enough to affect the food available to the Haudenosaunee towns and reservations that remained (Mt Pleasant 2007). Contrary to popular historical narratives that characterize Euroamerican settlement as a slow Westward movement of intrepid yeoman farmers, much of the post-Revolutionary era's Euroamerican settlement was materially facilitated by surveys, infrastructure subsidies, the advertising abilities of the companies who profited from land sales, and the ecological imposition of Euroamerican lifeways.

The increasing number of Euroamerican squatters in Genessee Country lands[47], threatened Company profits. In response, Ellicott structured a sale and settlement policy that aimed to preclude squatting that included corporate-subsidized development. Building roads, supply shops, mills, and inns, and investing in water transport were part of a larger strategy to make the lands more appealing to yeoman farmers. It was as much a practical

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[45] Discussion of constructing a route for water transport from the Great Lakes to the Atlantic Ocean had been circulating since before the American Revolution. The first published plan for a New York State canal system was in a 1785 pamphlet titled, "*Proposals for the Speedy Settlement of the Waste and Unappropriated Lands on the Western Frontiers of the State of New York, and for the Improvement of the Inland Navigation Between Albany and Oswego*," written by New York civil engineer, Colin Colles (Hauptman 2001, 10-11). At the time of the purchase in 1793, the US-based agent of the Holland Land Company, Theophile Cazanove, had already been investing in canal-building companies. Later, when Joseph Ellicott became the first canal commissioner of New York State in 1818, he did so with an understanding the increased value it would bring to the land he was trying to sell.

[46] Buying land and building homes and cabins near swamplands, these settlers were ill-informed of the best places to settle and suffered the consequences until the introduction of various public health efforts in the region in 1812.

[47] The treaties relevant to land for which the Company held preemption rights at this time included: The 1784 second Treaty of Fort Stanwix, the 1794 Treaty of Canandaigua, and the 1797 Treaty of Big Tree. The *Guswentah*, or Two Row Wampum treaty is relevant from the Haudenosaunee perspective, though not recognized by state or federal government at the time.

approach towards profit, and a way that Ellicott positioned himself as actively taming the land. He had been instructed to make, "certain Establishments along the old Genessee and Buffalo Creek road…leading from the Genesee River to the East end of Lake Erie." The first settlement was near the four cabins that Ellicott had stored supplies for the survey team. At each settlement along the road, mapped along the six-square-mile townships of the survey, he oversaw the construction of large cabins that could house a town representative, and also house travelers and their horses. Ellicott personally selected each town's representative and assured the Company that who he had chosen was loyal and a friend to the "Just rights and interest of the Holland Land Company" (Ellicott et al. 1937, 104). Expanding colonial rule into these lands in the US context of a republican agrarian ideal necessitated expanding rule over territory as much as a racialized population of people in that territory. In a 15 June 1795 letter to Cazenove, one Company agent wrote, "it will be in the best interest of the proprietors to limit this summer the sales at the quantity simply necessary to *vivify* the settlement." The agent continues, suggesting that land be sold at cheaper prices to, "some settlers whose character and circumstances would be a precious acquisition to the settlement." (Major Rover Alden Esq. 1795). What affected the price of land was not the quality of the land, but the subjective quality of the person buying it: the 'productivity' of their labor for company interests. The white Euroamerican subject as "pioneer," as Ellicott called the first occupiers, was imagined as the source of productive labor and life capable of bringing land out of a so-called wilderness. Sketching into the land infrastructures representative of Euroamerican settler order—namely roads, single-family homes, mills, shops, and fields—marked the landscape as valuable and governable, thus ordered and livable.

The white yeoman farmers who purchased Company property also framed the lands of Western New York, and their presence in them, in these same racial terms. In the 1810s, an allied group of agriculturalists in Western New York petitioned to the state legislature in support of their interests. One speech written and presented in 1820 by settler Isaac Sutterland argues for the taxation of nonresidents, namely the land-sale profits of Dutch proprietors of the Company from which the federal government previously released them. Sutterland's speech claims that small farmers are, "the actual settlers of a new country, whose labor like the hand of omnipotence, create a new world for the habitation of civilized man—and whose every drop of sweat is Christalized [sic] into Gold, to increase the unnatural wealth of foreign Lords." Sutterland presents white yeoman labor as a Godly thus supernatural force that transforms wilderness into "habitable" land through the physical efforts expended by their bodies. Positing yeomen as, "the honest and useful settler without whose toil and sufferings the speculators lands instead of yielding him a profit of cent per cent would afford convenient ground for the roaming savage, and shelter for his fellow wanderers, the panther and the wolf," Sutterland links the rising value of land to the labor of white farming land-owners through the metaphorical transubstantiation of sweat to gold (Sutterland 1820). He frames white yeomen as active agents whose labor orders and brings value to the land, making upstate New York unsuitable for an Indian imagined to be unproductively roaming across wild, untamed land. Framing so-called civilization of land also through anti-blackness, he omits enslaved Black labor on the land, rendering Black self-possession and humanness unthinkable within settler sovereignty and

land-as-property.[48] Conscripting Haudenosaunee peoples into the racial figure of *the Indian* or the savage, this racialization disavows the long-standing political institutions and relationships of Haudenosaunee to lands and more-than-human beings that encompass their sovereignty and regenerative lifeways.

The agents of the Company and the small agriculturalists who purchased property from them were in conflict with each other about whether capital or labor was adding value to the land, and who should justly benefit from that added value. A European-owned firm would be able to profit "unnaturally"—not by their own labor but rather by profiting off of the labor of US Americans—decisively against the US Revolutionary morality of independence and representation. Nonetheless, these two constituencies were united in their view of the Haudenosaunee people in whose homelands they were dealing: Indians did not belong on the land, and Indian land was wild and untamed land, low in value, ungoverned, and dangerous. This racist "settler common sense" (Rifkin 2013) shaped the local land market and settlement. For example, when the Tuscarora wished to expand their reserved lands in the northwest corner of the state, they had to write for special permission through the local Indian Agent not only from the current federal Secretary of War as ordered by the 1790 *Trade and Intercourse Act*, but also from the Company itself. This Act was put in place by the federal government, and decreed that congress had to approve and land transactions between Indians and non-Indians, and was put in place to allow federal oversight of the colonial project (Duthu 2008). Despite the Indian Agents' rigorous adherence to the *Trade and Intercourse Act* when Indians tried to purchase land for themselves, when it was purchased from Haudenosaunee by Euroamerican settlers the *Act* was often ignored. The Oneida lands that were in question in the 2005 *City of Sherill* case were purchased against the *Act's* laws in the early 1800s. Though the US Supreme Court upheld this fact in court just a decade prior, this did not preclude the devastating 2005 decision against the ONNY.

Conclusion: Colonial unknowing and incompatible landscapes

When the Supreme Court sent down its ruling on March 25 of 2005, the story made the front page of the local Syracuse newspaper, *The Post-Standard*. Despite the fact that many who in the newspaper's catchment area are Oneida and other Haudenosaunee, the article took a celebratory tone. The article's author weaves a David and Goliath tale of the plucky city of Sherrill in their brave "fight against the Oneida Nation" (Coin 2015). The narrative's hero is the City's lawyer, Ira Sacks. He is portrayed as a tenacious son-of-a-shopkeeper who offered to represent the tiny city for free despite being a high-profile New York City lawyer. After losing their case in all of the lower courts, the City didn't have funds left to afford a Supreme Court case. When the town won the case at the federal level, the article boasts, a public dinner of appreciation was held for Ira Sacks at a local inn. In this narrative, Reason and Order had won.

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[48] The co-constitution of black chattel slavery and Indigenous dispossession in upstate New York is understudied and a site of possibly rich future research. Recent archeological work (Gerard-Little et al. 2016) shows how plantations were transplanted from the US south after Haudenosaunee were dispossessed. See Harris (2004) for a detailed history of how early New York City elites, including those who planned the Sullivan Campaign against the Haudenosaunee, were involved in slavery in this era.

Embedded in the legal dispute behind *Sherill* are competing moral economies that, presented as questions of fee simple title and property taxes, hold deeper contestations over the relationships between territory and sovereignty. People in Sherrill and eight Supreme Court Justices conceived Oneida sovereignty as essentially bound to their current reserve and only applicable to tribally identified Oneida members, conceptually mimicking the cartographic carceralization that many maps of "Indian Land" continue to enact. The ONNY's efforts to enact their sovereign right to tax-exemption on parcels of treaty-guaranteed reservation lands brought contradictory views of land and sovereignty into active tension, and onto a legal stage set on colonial terms. As Simpson has noted, Haudenosaunee refusal to pay taxes is a refusal to play what she calls the game of citizenship: paying taxes are a move that would throw Oneida "out of their own sovereignty into settler citizenship and into the promise of whiteness" (2016, 328). The ONNY's repudiation of taxes is not reducible to preserving the $8,000 for which the City of Sherrill sued. With this refusal, the Oneida maintain that their sovereignty was not extinguished with the lands' illegal purchase in 1807, nor at any time since. Their sovereignty was merely altered, and overlaid by settler sovereignty: as long as the Oneida people exist, their relationship to the land has not faded like an ember, only changed. In a geography of refusal, the Oneida in turn figured US settler sovereignty, rooted in capitalist property relations, as extinguishable.[49] The ONNY threatened the power geometry of a US settler sense of place which regards itself as absolute.

With this settler sense of place and its attendant rights and securities threatened, the Supreme Court responded by re-solidifying a settler common sense (Rifkin 2013) view that colonial occupation is imperturbable law. Ginsburg's comment that the Oneida would be unable to "rekindle the embers of sovereignty that long ago grew cold" over this land situates and maintains settler sovereignty as absolute and singular, as the interlude to this chapter detailed. The case itself invoked the same hierarchies of race and place that were explicit when the land was first surveyed. Justice Ginsburg's opinion reads, "it was not until lately that the Oneidas sought to regain ancient sovereignty over land converted from wilderness to become part of cities like Sherrill." Like the settler farmer in 1820 above, Ginsburg invokes an anti-Indigenous spatial order of race and place, rendering Indian land a wilderness historically tamed by white settlement. Referencing the doctrine of laches, Ginsburg argues the ONNY had "slumbered on their rights"—or waited too long to reclaim sovereignty over these lands—an insidious argument considering that state and federal governments had prevented New York tribes from bringing any land claims to court until 1974. Additionally, the doctrine of laches in this case was argued as a matter of *equity*. Considerations of *equity* refer to a set of legal principles that bars people from asserting their legal rights if doing so is deemed "unconscionable." Justice Scalia commented during court proceedings that "[b]ecause of the passage of time, you can get damages for trespass. You may even get the value of the land." While Scalia presented the option of monetary reparations, he upheld that recognition of sovereign control of the land to the Oneida was not possible. In other words, Scalia circumscribed any dealings with the land that did not

[49] Similar to Simpson's (2013, 33) *cartography of refusal* which she defines as "people thinking and acting as nationals in a scene of dispossession," my use of "geography of refusal" specifies the non-cartographic nature of this refusal: it was not mapped, but rather enacted specifically through the land market, and again in the court case at hand.

uphold its representation as Euroamerican *property*—held privately and exchangeable for money.

Scalia went on to opine that, "[i]t would just create a *chaotic* situation if we say that you have jurisdiction in the middle of New York state over any pieces of land that you can buy." Scalia's suggestion that it would be "chaotic" for the Oneida to reclaim sovereignty over small tracts of land that are just three miles' drive from their tribal administrative building, strays into the realm of colonial unknowing that "forecloses possibilities of futures otherwise" (Vimalassery et al. 2016, 2). The unsettlement of America is considered chaotic by Scalia, "unconscionable" and, "a terrible situation as far as governance is concerned." Without evidence to such claims of chaos, Scalia legally reanimates the same biopolitical Indian character that 18th century surveyors trafficked, asserting that the ONNY would be unable to govern this non-contiguous territory. While it is imaginable that the ONNY may receive monetary compensation for land or that they may deal in commodified land, that they may *unsettle* places by regaining sovereignty over land is considered a form of *dis*order in the racial trajectory of settler sovereign landscapes.

The supreme court's choice to invoke the Doctrine of Discovery is also significant for understanding the anti-Indigenous choices made by 8 of the 9 justices in their decision. The Doctrine of Discovery, as mentioned above, rests on defining Indians as savages, wards, or heathens, rather than full humans. When the Doctrine was consecrated into US law in the 1830 *Johnson vs. Mc'Intosh* case, the humanity of Indians was denied, based in part on the supposed fact that they did not farm. The question of humanity and personhood in the eyes of US law had the chance to take a different trajectory in 1879, during the US Supreme Court case *Standing Bear vs. Crook*. In *Standing Bear*, Native Americans were declared for the first time, "persons within the meaning of the law" and thus given the legal right to habeas corpus.[50] Nagle (2011) importantly notes that despite the Standing Bear decision, court cases throughout the 20th and into the 21st century have ignored this precedent and drawn instead, predominantly from other court cases that denied the humanity and personhood of Indians, such as *Sherrill.* The question in Standing Bear was: is Luther Standing Bear, and all Indians, persons or not? Few have written, however, about the aftermath of becoming a person. Luther Standing Bear was forced to renounce his position as chief and of being Ponca in order to free himself from Fort Omaha and return

[50] Two years prior to the case, a portion of the Ponca peoples were violently removed by the US government from their lands in Nebraska, to a reservation in Indian Territory (land now called Oklahoma). Ponca Chief Standing Bear's son had died from disease contracted during the 55-day journey, and in 1879 Standing Bear broke federal law by leaving Indian Territory [footnote "off the reservation"] to bury his son's ashes back with their ancestors in Nebraska. Ponca leaders joined him to refuse their removal, and Luther Standing Bear and his brother were arrested and jailed by General Crook at Fort Omaha. Standing Bear's lawyer challenged the idea that Indian's racial status as savages gave the federal government plenary power—complete, limitless and extra-judicial power—over Indians. Suggesting that they did cultivate soil and live in houses, Standing Bear's lawyer appealed to their personhood in the eyes of US law. Judge Dundy, who wrote the final opinion, sidestepped the question of the status of Indians as *humans*, as opposed to savages, heathens, or wards, as they had been described in previous court cases, but focused instead on the question of personhood, determining that the dictionary definition of a "person" was wide enough to include "even an Indian" (quoted in Nagel 2011: 488). Being a person in US law grants an individual the right of habeas corpus, or the right of holding over one's own body.

to his people in Indian Territory. If he remained Ponca, he would remain in the position of being an outlaw, or an enemy of the US state. Though gaining personhood in the eyes of US law and settler sovereignty, he could not also be a Ponca. Indianness and personhood were deemed at odds. The right to property over self, and over land, was reserved for those who would attempt to claim for themselves the whiteness of property.

In a tautological turn of events, when the Oneida Indian Nation of New York aimed to enact sovereign rights on former-reservation lands that they had purchased into trust a few years after *Sherrill*, as the *Sherill* decision suggested would be the "proper" way to gain sovereignty over these lands, it was the *Sherill* decision itself that was cited in later legal arguments *denying* this request. In this legal narrative the expansion of Oneida sovereign territory remains unthinkable and chaotic. Because Indigenous spatio-political orders pose such a threat to the legitimacy and sovereignties of the modern liberal nation-state, they are constantly erased, contained, and surveilled (Simpson 2014). Key to understanding a geography of refusal is demonstrating that the technologies of property-making and Euroamerican settlement are not absolute: they can fail and have failed. Haudenosaunee territoriality today is alive within and beyond the legal strictures of recognition. It is one of multiply-entangled landscapes that are both non-contiguous and overlapping, and always contested, despite centuries of efforts by various colonial actors to extinguish the peoples, their knowledge of the land, and their sovereignty with it.[51] Despite such Supreme Court rulings as *City of Sherrill vs. Oneida Indian Nation*, the politics of place in upstate New York have not been settled.

[51] For a critique of this case, and an outline of the contestations *among* Oneida and other Haudenosaunee peoples regarding this case see (George-Kanentiio, 2006). This chapter's arguments about the racialized nature of settler state territoriality and commodified property stand regardless of these internal conflicts.

Interlude II

Archives and/of refusal: finding the strawberries

To navigate one's way into the archives of the Thomas Indian School (TIS) at Albany, NY, requires a readiness to approach their contents, and fare whatever claims about oneself or one's family may be held in them. It also requires time, money, and other resources that are not equitably distributed. For both living former students and graduates of TIS and for their descendants, sourcing the letters, reports, and photographs of themselves and their kin in the archives is unfeasible. It is an ongoing project to reckon with the lack of control that those most affected by TIS have over their archives and their data. As I was in the archives, I grappled with my own access to the Children's Case Files. The credentials that allowed me access were not solely from my family connection knowing that a distant cousin's grandmother attended the school, but also from my affiliation with a research institution, UC Berkeley. The academy, and the practice of creating knowledge for it, traffics in making objects out of Indigenous people, lifeways, histories, bodies, or blood samples. This interlude introduces my methodology to the archives, situating it in relation to Indigenous feminist felt theory (Million 2009), and to refusal. While the archives themselves are structured by colonialism (Stoler 2010), Indigenous researchers can find their people's medicines and stories between the grains.

In the Thomas Indian School archives, berries and strawberries emerged repeatedly, creating a kind of pattern in my daily encounters with the microfilm that modern data-coding software would have quickly glossed over. Strawberries are central to Haudenosaunee lifeways, being a kind of food that is "more than nutrition, it is bound up with social relations, culture, and meanings of health" (Hoover 2014, 168). Today, strawberry drink—mashed strawberries mixed with maple syrup or sugar and diluted with water—is still served at every Haudenosaunee community gathering. As a friend noted at a corn workshop on Gayagohó:no' (Cayuga) territories along the western shore of Tiohero (Cayuga) Lake, you know you are being well taken care of when you drink it. During my research, the strawberries returned again and again, as they did in my meetings with TIS survivors and their descendants.

The TIS Children's Case Files sit behind a web of legal issues and ethical dubiousness. There is a policy within the Department of Social Services that states that no record about children within the state of New York should ever be released. This kind of policy, if followed in the strictest sense, would keep even the letters from students and family members from returning to their kin. When TIS was first institutionalized within New York State in 1875, it was under the auspices of the New York State Board of Charities, a department which no longer exists today. The very last entity that TIS sat underneath was the Department of Education, and as such, the New York State Archives in Albany, NY consider TIS records to be "theirs," because they institutionally sit under the same department. The lead archivist noted that he has been liberal in allowing survivors, graduates, and descendants to view their own records. Descendants who are also researchers, in my observations, have had full access to the case files including medical records. However, in my interviews and discussions with family members trying to access their kin's archives have reported a number of difficulties. A number of issues came up in our discussions: from the distance and time to get to Albany, to an obscure website, to a lack of funds for printing (or a sense of injustice for paying for one's own

records), to disappointment in the amount of redacted information (which has included, for some descendants, all medical records including mental and physical health records). Many feel frustrated and are left with many more questions after receiving their files.

As a university researcher affiliated who also had personal and familial connections to TIS graduates and descendants, I was allowed to see these redacted medical records. According to research protocol laid out by the lead archivist, I would be allowed to report on the contents of these medical records as long as I anonymized the information: I could change the names, alter dates, build composite characters, and analyze trends and common practices, but not present individual cases in regard to health data. As I read, re-read, and re-arranged these files on my computer screen and in my mind, I came up against two analytic quandaries about presenting and analyzing the information in the medical records for the sake of academic scholarship.[52] First, the aspect of my identity that ultimately allowed me access to all of the medical files was my position within the academy, rather than my relation to the community of TIS graduates and descendants. This exclusive access is, thus, a characteristic of the colonial dynamics of the archive itself. The paternalism of these archival policies arcs out from formal Indian law and into the interstices of policies shaping native life, resembling the structures of wardship that structure domestic dependent position of tribal nations.[53] Not only were medical procedures and physical and mental health examinations performed on the children either without consent, or within a rubric of "consent" that is already structured by racisms and colonialism (Benjamin 2016; Simpson 2016), the storage of those documents as state property is also done without clan or familial consent. Many people don't know that the files—either their own file, or that of a parent or grandparent—exist.

Second, was the question: should I, as a researcher construct a narrative using the medical information in the records if it re-incites, in written form, the violence and subjection of the children?[54] To code the data by amalgamating the student's experiences into trends, patterns, and commonalities could be to make an object of them yet again. Observation of those records in the archive is rooted in the epistemology of the colonial gaze: for the sake of "critical" scholarship, a researcher would be allowed by the state—as the self-proclaimed owners of the archive—to analyze what was done to students in the clinic or in the dorms, presenting the discomfort or violence experienced by the

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[52] It is my ongoing work apart from this dissertation to explore with the proper governing bodies and departments who represent those affected by Thomas Indian School, and those affected themselves, how and if to discuss, disseminate, or make information about the medical procedures and services at the Thomas Indian School available in any way. Suffice to say here: these medical records overwhelmingly demonstrate the racist and anti-indigenous anxieties of those who were in the position of "caring" for the children at TIS. The records do not in any way show that the Haudenosaunee children were deficient or lacking in any way.

[53] Piatote (2013, 5) analyzes the language of the decision of the 1831 Supreme Court case which defined us tribes as domestic dependents of the US federal government, *Cherokee Nation v. Georgia.* She shows how, "the same domestic and familial metaphors that rationalize the order of the settler state serve as a legal and material structure of political relations." Positioned as keeping the archives safe for the good of the people seeking them, the New York State archive is situated as the benevolent guardian of the children in the archives and of their adult descendants.

[54] See Tuck, 2009.

children as further evidence of TIS administrator's misguided and racist practices of "care." Some Indigenous scholars have created powerful narratives of archival refusal (Terrance 2011) that refuse to publish or analyze any writing they find in the archive that was not initially created for public circulation. Yet, as Lomawaima (2016) reminds scholars who engage in the project of renarrating Indigenous histories, there are times when silence about the violence we find in the archives serves colonialism, aiding forgettings and allowing moves to innocence in a genre of colonial apologia.[55] Miranda (2016) draws on Million's (2009) *felt theory* in order to "push into the pain," arguing that to admit feeling pain and grief is not a show of weakness, but vital to Indigenous futurity.

To avoid using the children's experiences as "evidence within a debate" (Trouillot 1991, 33) that is not about, with, and for the children's people and their descendants, I have chosen or refused the archival information that I will analyze carefully. In other words, what I have chosen to include in this section, or refused to offer up for academic analyses despite its potential richness, is always a conscious and careful decision. My choices were made, as Simpson has elaborated, with recognition of the "unequal scene of articulation" in which the desires, disgust, and anxieties of settler colonialism prefigure any story about Indian, or Haudenosaunee life (Simpson 2016, 328). I have chosen or refused any analysis of these colonial archives, at all times, with my Grandmother, Alberta Nancy Wright Bauer, as well as my great-grandmother, great-aunts and great-uncles in mind: they all attended the Mohawk Institute, just two and a half hours north of Thomas Indian School. What would I want told of their stories, even if it hard to learn? As an Indigenous feminist approaching these archives, I position myself explicitly in order to offer an historical narrative that recognizes the way the history, as Dian Million (2009) writes, haunts our land and our bodies. In analyzing select records in select ways, I do not aim to re-articulate another Indian victimology (see Vizenor 2008, 11; Miranda 2016, 376). I analyze the workings of this particular example of settler colonial regimes of care, in its private and public iterations, to add my text among those who give space or credibility to people who live with the cryptic and painful afterlives of Thomas Indian School, so we may continue or start residing in places beyond the Indian boarding schools. To do this, there are two kinds of information I have found in the archives: that which I take as part of my given analyses, and those which were medicine and gifts that helped me—and which I hope can also help boarding school survivors and my readers—push through the pain of the archive.

To help me define these two kinds of information, I draw on understandings of *data* and *capta.* As Rodriguez-Lonebear (2016) writes in her work conceptualizing Indigenous data sovereignty, the term "data" comes from the Latin *datum*, meaning "something given." The information about the children in the archives was, like many historic Indigenous encounters with research, more akin to *capta*, something taken, captured, captive. The question arises, then, are the children held captive by the numbers, charts, and notes in their case files? Drucker (2011), who also cites this etymology in her critique of data, suggests that the key difference between data and capta are that the prior is found or collected without searching for it. True data is given to the one who happens upon it. The latter, capta, is searched for actively and thus always has assumptions hiding behind it. Thus, almost all of what is called "data" in scholarly or other institutional

[55] CF: Tuck and Yang (2012)

research can be more accurately described as capta. Drucker's analysis offers useful insights for thinking through the way that what appears as data in files, charts, and graphs has been created relationally to the observer and to the audience. Extending her analysis from modern scientific, governmental, and medical data, to that same data found in archives, I suggest that stories of the children and any 'truth' about their experiences at the school can't be found in the archives. It is the relationships between the children, their loved ones and communities, and TIS administrators and other personnell that are suspended or held captive in the archive of the Thomas Indian School. Through some interstices, a grandmother's love or a young girl's defiance and fortitude unfold in the archive. Though for the most part, the case files and other archival documents are written by failed witnesses (Hartman 2008): TIS administrators who could not truly *see* the children and their relations.

While the school's practices created a space of extreme isolation, and an aching sense of the students' loneliness pervades the archives and my interviews. The case file itself also reveals how TIS administrators were engaged in a practice of white self-fashioning. The information—or capta—in the forms, charts, and notes that make up the TIS archives shows how TIS administrators, other personnel, and their audience were captivated by the children and the files. I explore these analyses in the next chapter, which I have written with a distance that I hope is ethical, and with a closeness that is felt (Million 2009). It has been my imperative to write a narrative of Thomas Indian School and its afterlives that does not merely incite and inflict the same violences that TIS administrators and in-house physician had already brought to bear, nor to uncritically fail to report those violences. For this, I have foregrounded strawberries in the following chapter. They became the true *data*, a gift—that which was given, and which I did not look for—with which I could tell a story about the Thomas Indian School that narrates more than a story of victimization and pain. Like its archives, Thomas Indian School stretches far beyond its time in operation, and materially far beyond its campus near Gowanda, NY. The extended effects of the project to "civilize" or assimilate Indian students through schooling are felt through generations.

There is little closure for descendants to be found in the pages of this story of Thomas Indian School I have written in the following chapter. Even those people to whom I have returned pieces of their family's case file, the story remains incomplete and possibly tainted by the fictions of history in the archive. Just as those case files and the records of the Thomas Indian School do not encompass or capture the students who went there, they also cannot fully narrate their lives and experiences at the school. Those of us living the afterlives of boarding schools and residential schools sometimes find that stories are often left desiccated by the entwined silencings within the archive and the silences of our family members who attended them. As Saidiya Hartman (2008, 8) writes, "[t]he loss of stories sharpens the hunger for them, so it is tempting to fill in the gaps and provide closure where there is none." Troubling ourselves to build stories that help us understand histories of our families in Indian Boarding Schools involves navigating the tropes that have arisen around the schools, the stuttered stories we receive, our own heavy imaginations, and all of these case files and records that remain as part of the schools' material afterlives.

2 Family

Over the 102 years that the Thomas Indian School (TIS) in Gowanda, NY was open, from 1855 to 1957, over four thousand children between the ages of 4 months old and 16 years old were admitted to the institution. The bulk of the archival materials from Thomas Indian School sit about as far as one can get from the school's campus while still being in New York state. A six-hour drive, in good weather, will get you there from Cattaraugus Seneca territory near Lake Erie, where the old TIS hospital now houses the Seneca Nation of Indians government administration. In the New York State Archives at Albany, NY, there are 112 rolls of microfilm, with about 1000 pages in each roll, which contain the children's case files. Though most of the school's buildings still stand, many of the original documents from the Thomas Indian School deteriorated or were destroyed before it could be archived, and a lot more were merely not saved when the school closed in 1957. These documents are sometimes used to fill in stories and memories of the Thomas Indian School for graduates and attendees and their descendants, though they are hard to procure for TIS graduates and attendees, as they are held as property of the New York State Department of Education. In Albany, the files are roughly catalogued and sit guarded behind the discernment of the lead archivist, as the medical information within them is legally restricted and the laws around their public access are murky. This chapter attends to the case file as a technology of US colonialism, and analyzes the contents of those case files to find the efforts to separate and isolate children from broad kinship systems relied on anti-Indigenous discourses of contamination and disease, and practices of measurement and containment of their bodies.

When I began research for this chapter, I embarked with the urge to construct stories of the young boys and girls, men and women, who attended the Thomas Indian School: to piece narratives of their lives together from the traces I could find in the archives. When I sat with the urge to write the children's stories, I found that it would be impossible to piece together narratives of children's stories from what I found in the archives alone. Their stories weren't there to tell. Except in few letters from a graduate to the superintendent, or a transcript of a harsh disciplinary session, the children's voices are silent or their words remain there contorted through the authority and racism of the administrators.[56] The data captured the archives about why children were admitted, what medical procedures were performed on them, or how well they scored in their studies, tells more about the child welfare agents, the TIS physician, or the school's superintendent[57] than it tells about the students themselves. Incorporating archival

[56] Because of the silences that exist in the afterlives of Indian Boarding Schools—in the archives, in the voices and narratives of survivors, and in my refusal of sharing pain for the sake of scholarship to offer to the academic altar of liberal redemptive shame (Povinelli 1998; Million 2009)—it is tempting to fabricate a witness, or a moment to be witnessed. In other words, it is tempting to try to write those untold stories. To fabricate a witness, at times, can be a means toward redress, as Hartman and Best (2005) have written. It is to name a wrong, a violation, and to submit it as evidence.

[57] During the school's 102-year history, there were nine superintendents, and two brief periods where interim superintendents were employed. There is some variation in practices and methods between superintendents. For more information on this see Quigley (2019), or Burich (2016).

research and interviews with graduates and survivors of TIS, this chapter analyzes how Euroamerican understandings of *family* became entangled and defined through the assimilation policies of the US as a liberal settler colony, at the turn of the 20th century. I show that the case file, as a technology and now an artifact that gained specific prominence in the early 1900s, emerged as a technique of creating and managing the Euroamerican sense of family, and which absolved the colonial violence that was imposed on the children's entire communities.

Originally called the *Thomas Asylum for Orphan and Destitute Indian Children* when it commenced in 1855, TIS began as a mission-based "asylum" run largely with philanthropic funds, located on Seneca territories in Western New York. When it began as a home that took in Native children of those reservations who had been orphaned, it was run by a Presbyterian missionary and his wife, and funded by the American Board of Commissioners for Foreign Missions (ABCFM). By 1875, the asylum had grown in size, and it was placed under the authority of the New York State Board of Charities (an equivalent to today's Department of Health and Human Services). The colonial project of assimilating Indian children was far vaster than the 106 federally funded and administrated Indian Boarding Schools within the United States. The National Native American Boarding School Healing Coalition today estimates that there were over 350 Indian Boarding Schools across the United States, if one includes mission and state-based institutions such as TIS. The historic and analytical scholarship on Indian Boarding Schools has, for the most part, focused on the federal programs that were born of General Richard Henry Pratt's federal project epitomized in his quote, "kill the Indian, save the man." The Thomas Asylum was established more than a quarter century before the first class of students entered the cavalry barracks-turned-school called the Carlisle Indian School in 1879, where General Pratt's plans for boarding schools exclusively for Indians with an explicit civilizing mission initially materialized.

Despite being funded and managed separately from the larger federal Indian Boarding School project, the discourses and dynamics between the projects were largely similar. TIS administrators were in direct conversation with the philanthropists and politicians behind the federal boarding schools, and sometimes sent TIS graduates to some of these institutions such as Haskell in Kansas and Carlisle in Pennsylvania. In the eight years between the beginning of the federal Indian Boarding School project in 1879 and the Dawes Allotment Act in 1887 which dispossessed Native people of over 90 million acres of land in total and divided communal holdings into individual nuclear-family plots, philanthropists, policy makers, and administrators wrote and spoke of allotment and schooling as interdependent projects that would end the newest iteration of what they called the "Indian problem" (TIS Annual Report 1884; Piatote 2013; Quigley 2019). On the heels of Jackson's Indian Removal policies and the Indian Wars, these colonial projects of assimilation became wars, as Beth Piatote has analyzed, on the Indian family (Piatote 2013). My work joins these previous analyses of "post"-Indian Wars dispossession that look beyond allotment towards boarding schools as sites of dispossession (Piatote 2013; Lomawaima 1995). The unique history and location of TIS—as a state-run institution on reservation lands—allows me to analyze how particular colonial practices of captivity, isolation, and assimilation worked at the school despite the relative geographic proximity of the students to their families and homelands.

This chapter shows how seemingly opposing colonial projects—of extermination and assimilation—dually animated governance in the Thomas Indian School: its administration, curriculum, and operational rules were key aspects of humanist care within this colonial project. I show that the boarding school project separated families as many scholars have noted (Lomawaima 1995; Child 1998; Jacobs 2009; Piatote 2013; Estes 2019), and extend this to understand how Indian boarding schools refashioned relations between the children and their kin, including their more-than-human relations. The aim of the Thomas Indian School—to "civilize" the Indian child and prepare him or her for assimilation into US American society through the production of a productive laboring individual—was attended by practices of quarantine and containment, and discourses of infectiousness that accompanied a fear of Native homes as places of degeneracy and demoralization. These practices were described and imposed upon the children and their relations—these relations encompassing those with kin and non-human[58] persons. Yet when administrators wrote about the Indian family as a site of racial contamination, they could not conceive of the broader kinship relations in which they were attempting to intervene. By shifting the focus on family in the sense of a nuclear family and home, to Haudenosaunee kinship relations, I am able to analyze how particular practices of health-making were enrolled in a colonial project aimed at disconnecting Native children both from their kin and their homelands.

In this chapter I analyze the children's case files for its contents and as evidence of a performative act of constructing the file, to reveal a new regime of apprehension that emerged.[59] The case file is an object that constructs the archive, and it is a genre itself. The case file as a form is not intended to be consumed as literature or as a genre to be analyzed in its context and circulations. Case files were produced, and proliferated in social work in the early 1900s, as a technology to collect documents that contain particular information or evidence about a subject or individual. A child's case file from the Thomas Indian School may contain their application to the school, intake forms, mental and physical health evaluations, grade reports, and disciplinary reports, alongside letters to or about students and their families. I analyze the case file as an object and a genre, with a form, a function, a context, and with particular users and circulations, in order to reveal the intersections of US colonialism and the case file as a technique of both discipline and surveillance. Drawing on the three meanings of the word *apprehension*—anxiety, capture, and understanding—I analyze the techniques and procedures within

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[58] I draw on Zoe Todd's (2017) description of non-human persons, to understand relations and responsibilities that humans have to non-human persons including oil, fish, and berries as political and social relationships with particular grounded Indigenous histories. Scholars within the fields of geography and science and technology studies have suggested the term "more-than-human" for understanding ontologies and epistemologies outside the human realm. I refrain from its use as it re-inscribes a hierarchy by using the word "more" and sidelines colonial histories of "Othering" those beings not falling under the elastic category of human.

[59] Introducing my term 'regime of apprehension,' I draw on Foucault's analytic of a regime of truth. Foucault used this term to link the political notion of a *regime* with an understanding of the production of truth and power. Truth, wrote Foucault, is "a system of ordered procedures for the production, regulation, distribution, circulation, and functioning of statements" (Foucault 2003 [1976], 112). Produced by systems of power, certain techniques and procedures become recognized and validated to obtain truth within a given society at given historic moments.

Thomas Indian School that reproduced US colonialism. These case files were written and collated by Euroamerican settler bureaucrats and administrators for their peers, and thus contain evidence of their fears and anxieties about the reproduction of Indigenous social and physical life. I detail the practices of quarantine and surveillance of which the case files also contain evidence: practices that administrators used to keep children in the school and away from their families, despite many of the students being so close to their homes. As those who worked at TIS framed their work as charity, I also analyze how TIS administrators and matrons absolved themselves from the colonial violence of Indian boarding schools.

These records existed then, and are sometime read today,[60] as a sign of care. As the third section of this chapter shows, the dual spectacles of care—the public display of philanthropy, or the private captivation of the administrators with contagion, sexuality, and reproduction—cannot be cherry-picked by a researcher to be measured in regard to how many lives were made longer or diseases suppressed among the children in the Thomas Indian School. The case file was a privileged entity of the civilizing apparatus that extended beyond the school's campus, serving a public spectacle of care, but also as a disciplining practice which performed reason and order through bureaucracy. Just a quarter century before the first case files came to be used prominently at Thomas Indian School, Lewis Henry Morgan wrote in his violently premature nostalgic prose, that, "[w]e shall ere long look backward to the Iroquois, as a race blotted from existence; but to remember them as a people whose sachems had no cities, whose religion had no temples, and whose *government had no record*" (Morgan 1851, 137, emphasis mine). Capturing the lives of children in the case file and the record was itself part of the civilizing process at TIS, in the sense that it both conscripted their individuated lives into the archives of US colonialism, and its creation performed a ritual of governance and order that reproduced a white Euroamerican superiority and innocence through racialized bureaucratization.

The first section of this chapter describes how TIS administrators severed Haudenosaunee children from their kin, their other-than-human relations, and their lands. The section begins with the strawberry to understand how relations to land and kin were refashioned during the boarding school era. As I described in *Interlude I*, the strawberry and other berries were the true data in my research: that which emerged in the archives and which I did not look for. Indigenous geography as a process of research and writing is always entangled with the futurity of Indigenous worlds and life. The strawberry sits in a central position of Haudenosaunee kinship relations, cyclical markers of time and seasons, and is a recurring image in creative productions as well as part of gatherings and

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[60] CF: Hauptman, 2014. Hauptman's article on Dr. Lake may assuage some concerns about the treatment of the children's diseases and showcase Dr. Lake's public health efforts at the school. However, the article ignores Dr. Lake's blatant racism within his reports and notes, and it takes Dr. Lake's efforts to rid the student population of disease and improve the strength or "fitness" of their bodies at face value. By connecting Dr. Lake's efforts at health-making from contemporary concepts of so-called "positive" eugenics, racial "uplift," and general racism and disdain for Native people on Native lands, the biopolitical aspects of his seeming beneficence comes into focus in this chapter.

collective life on the land.[61] Thus, taking the strawberry as a guide within the archives and for the narration of this chapter is both methodological and aspirational. I show how TIS authorities' procedures attempted to sever kinship relations of the children: to parents, to grandparents and aunts and uncles, and to berries. At a time when the strawberry was itself being transformed and mutated to be harvestable and packageable on growing industrial farms and in canning factories, the young women who labored at TIS were trained by superintendents and matrons in the gendered individuating practices of strawberry picking and preserving. I also show in this section how TIS administrators not only cut children off from their immediate families and strawberry relations, but also from their Indian lands as colonial constructs, as they demanded that each new student remit any state or federal annuity monies to the school. I will return to the strawberry in the final section to discuss how strawberries also mediate relationships between the present, past and the future, with their emergence and celebration every year, as they are mashed and mixed with maple syrup at Haudenosaunee gatherings, and their representation in beadwork, stories, and paintings.

The second section, *Surveillance, Severalty, and Schooling* holds the more painful stories of this chapter on the Thomas Indian School. Surrounded by institutions that were explicitly speculating on Indian death or disappearance[62], an institution such as Thomas Indian School may appear as a gentler or more benign organization. Even as some graduates or survivors remember, they are grateful to have received "three hots and a cot"[63] when times were thin, as one graduate conveyed to me in an interview. The racial politics of colonial systems of care reproduced a bourgeois racial superiority through variously charitable and coercive types of care. This section links the Thomas Indian Schools' mandate and practices with that of state-managed severalty, or the division of Haudenosaunee sovereign land holdings into individual plots held by male heads of family. The racist theories of assimilation espoused by TIS administrators undergirded the practices and methods of surveillance—physical and mental—to which they subjected the children. I show that ultimately, the archives of this failed project of assimilation reveal the threat that Haudenosaunee matrilineality posed to the settler state. TIS administrators were captivated with control of young Haudenosaunee women and their fertility: namely, their ability to reproduce and recreate Indigenous life, and the Indigenous futures held in their bodies.

The last section considers the role of the case file both as a contemporaneous technology during the school's running, and as part of the archive of settler colonialism. As part of the archive of TIS, it is how survivors and graduates of the school and their

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[61] The role of the strawberry need not be cited to one particular scholarly source, as it is well known among Haudenosaunee people. Mohawk midwife and scholar Katsi Cook (2004) has a grounded overview of the historic and contemporary use of the strawberry in Haudenosaunee communities. Horn-Miller's (2009) scholarly work describes how the animals that helped gather soil on the turtle's back for Sky Woman to plant her tobacco and strawberry seeds in became the families, or clans, that continue to guide domestic home and political structures of Haudenosaunee life.

[62] Namely, land grant universities such as Cornell University, canal investors, railroad investors, and the list may go on.

[63] This is the language one of my interviewees used to describe the benefits of TIS, referring to three hot meals a day, and a cot to sleep on a night.

families and descendants encounter the children's pain, or how they fill gaps in stories that were never fully told or never told at all. This section does not venture for closure, but rather sits with the messiness of boarding school histories and their afterlives. This conclusion speaks to the interest in the United States to begin more public processes of reconciliation after Canada's legal cases and federal Truth and Reconciliation Process. Exploring memory, testimony, and the case file, I leave open the questions: what is left to allow us to narrate "what the boarding school was," for whom is this written, and what purpose does such a narrative serve? Understanding that the project of the Indian Boarding School ultimately failed, despite the legacies we live with, isn't quite enough to deal with the pain. Strawberries are one way forward, and they've always been there for us, reconnecting to the land, our relations, and our people.

Assembling fungibility: strawberries, labor, and land

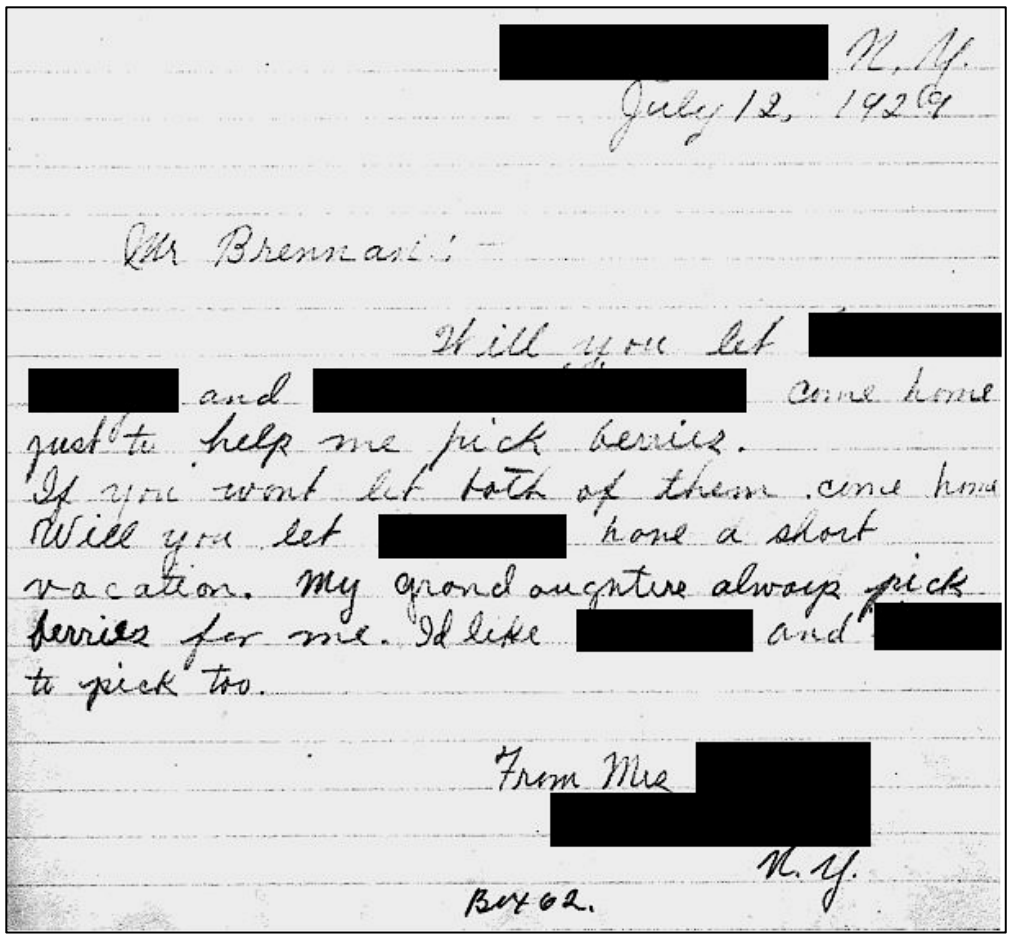
Returning again and again in fieldwork and in the archive, strawberries came to mediate my relationship to this research. Strawberries, wild ones in particular, are understood in Haudenosaunee lifeworlds to be Big Medicine: they are the first berry that arrives in the summer, they are celebrated and thanked every year, and they are the first berry brought by SkyWoman when she birthed the people. In the archives, strawberries discursively and materially mediated relationships between Haudenosaunee children and TIS administrators, the children and their families, and the children and their land. The first time I found a berry in the archive[64] was when I came across a letter from a grandmother to the TIS superintendent at the time, written in 1928. Mrs. Weaver[65] had three of her granddaughters at the Thomas Indian School, where they had been taken in 1922. Their mother had died, and their father was, according to the intake form, unable to take care of the three girls. It is unclear from the records to what degree Mrs. Weaver agreed with the girls' entry into TIS, but her role as sole caretaker was not considered. The words of the TIS administrators dominate the children's case files, despite the few letters such as this one presented below.

Grandma Weaver lived just seven miles away from of TIS, in a small town off-territory with two younger grandchildren. The letter is written addressed to Mr. Brennan, the superintendent. Direct with her request, Mrs. Weaver's first line of the letter requests that he let her two granddaughters, "come home to help me pick berries." Written in early July of 1929, Mrs. Weaver would likely have been writing about strawberries or blueberries that fruit that time of year in upstate New York. Mrs. Weaver quickly tempers her request, with the second line of the letter reading, "[i]f you wont let both of them come home Will you let Alma home a short vacation." Possibly anticipating the superintendents unbending tendency to keep the children at the school during the summer months, she provides a smaller request within her letter.

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[64] In noting that I found berries, and did not seek them, I aim to bring integrity to my own research and iterative research process, and reject the common narrative of pre-figured research questions and answers.

[65] The names of the TIS students and their families have been changed in this chapter to maintain anonymity.



[redacted] N.Y.
July 12, 1926

Mr Brennan! -

Will you let [redacted] and [redacted] come home just to help me pick berries. If you wont let both of them come home Will you let [redacted] home a short vacation. My granddaughter always pick berries for me. Id like [redacted] and [redacted] to pick too.

From Mrs [redacted]
[redacted] N.Y.

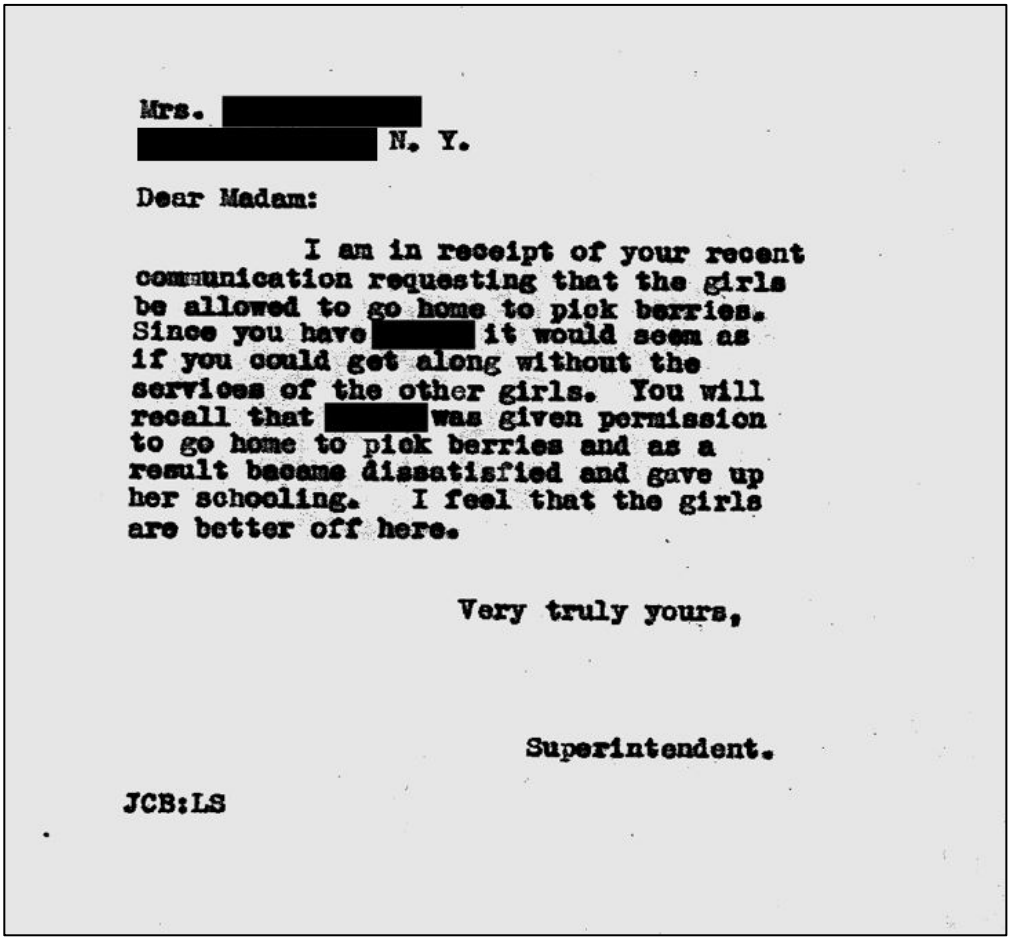
Box 62.

Image 5: Letter from Mrs. Weaver to Superintendent Brennan.[66]

Ethnologists at the time, as the following section will show, refer to berry picking among Native people as a 'subsistence' activity. Picking berries was framed by white scholars to be a practice that marked a civilizationally inferior method of obtaining food in comparison to Western agriculture and marketing. Labeled a cultural practice, picking berries stood as a racial marker of Indianness. For Haudenosaunee among other peoples, collecting berries together as an extended family is a practice that cannot be understood within a civilizational hierarchy which implies that Indians were eking out an existence from outmoded practices on unimproved land. It was, and is, a seasonal time to gift stories or news about the community, then celebrate and thank the berries' arrival in the community, and, as one TIS graduate's daughter told me, a great time for making new babies. In what can be read as a message of love to her granddaughters, Mrs. Weaver presents her longing for them in her letter, hoping they may come back with her perhaps to story the berries on the land. Writing, "[m]y granddaughters always pick berries for me," she reminds the superintendent that this is something she and her granddaughters do together every year. Ending the letter, "I'd like Alma and Trudy to pick too," she notes

[66] Thomas Indian School, Children's Case Files, roll 88. New York State Archives, Albany, NY. Names have been redacted by the author for anonymity.

their absence even as she has other granddaughters at home with her, asserting their belonging in the family. Longing, as the affective substance of be/longing, defines the emplaced relations in which Mrs. Weaver envelops her granddaughters in the letter. The berries mediate her desires to be with her granddaughters, and she narrates them as an essential and yearly recurring part of their relationship and as relations to the girls themselves.



Mrs. [redacted]
[redacted] N. Y.

Dear Madam:

I am in receipt of your recent communication requesting that the girls be allowed to go home to pick berries. Since you have [redacted] it would seem as if you could get along without the services of the other girls. You will recall that [redacted] was given permission to go home to pick berries and as a result became dissatisfied and gave up her schooling. I feel that the girls are better off here.

Very truly yours,

Superintendent.

JCB:LS

Image 6: Letter from Superintendent Brennan to Mrs. Weaver.[67]

Mr. Brennan's letter in response is dated only three days after Mrs. Weaver's request, so his denial would have come quickly to her doorstep.[68] It begins with a pro forma opening, "Dear Madam: I am in receipt of your recent communication that the girls

[67] Thomas Indian School, Children's Case Files, roll 88. New York State Archives, Albany, NY. Names have been redacted by the author for anonymity.

[68] Like all letters from TIS personnel that made it into the archive, it is unsigned: this is the copy that would have been saved for the TIS files, with the signed original sent out to the recipient. The initials after "JCB", ":LS," in the bottom left corner refer to the young Seneca woman who I learned in my interviews was assigned as typist for Mr. Brennan. Copying each letter he sent out for the archive, she would have become a skilled typist, and acutely and painfully aware of the severe policies keeping herself and her fellow students at the school.

be allowed to go home to pick berries." He first notes that the girls' older sister, Mabel, is already at home living with Mrs. Weaver: "it would seem as if you could get along without the service of the other girls". His first reason he lists for not allowing Alma and Trudy home are that Mabel is there to pick berries for Mrs. Weaver and therefore the two other girls' labor, or "service," should not be needed. Framing berry-picking as a "service" done for Mrs. Weaver by her granddaughters, Brennan can only see or comment on the transactional aspects of berry-picking: amassing a sufficient quantity to be saved or sold on the market, in his view, could be done by the labor of Mabel and Mrs. Weaver alone. The assumed fungibility of Alma and Trudy's labor—that it could be replaced by Mabel's labor—renders Brennan's response either blind to or scornful of collective practice on the land. Additionally, he renders the land on which they gather to pick berries not a place to which they belong, together, but as an interchangeable place, as the land is reduced to its ability to render a berry harvest.

Importantly, this reason is not the only one in the letter; Brennan provides a second justification. In a review of many of Mr. Brennan's responses to parents, aunts, and grandparents' requests to have their children home, that he would provide two justifications to deny a visit home is a digression from his norm. Many of his letters contained little justification, or as the following section will show, named a concern for the health of the children as a reason to keep them from their families. In this letter, Brennan also cites berry-picking with her grandmother as the causal reason for which Alma and Trudy's older sister, Mabel, had deserted the school. He writes that Mabel, "was given permission to go home and pick berries and as a result became dissatisfied and gave up her schooling." In a moment of concession to the impact and significance of picking berries together, Brennan intimates a fear that berry-picking may be a threshold from which he would be unable to pull the children back into the fold of the boarding school. Brennan boasted often, in the annual reports of the Thomas Indian School that were presented to the New York State Assembly, of the "complete control of the children" that he had. From letters such as these, however, his anxieties over losing students become evident. On the other hand, this comment could have served in his mind as an instructive to Mrs. Weaver: many of these letters and those of other TIS personnel were written not in a way that would *justify* their actions and protocols, but in a style meant to instruct the (Indian) reader in the superintendent's ostensibly superior and careful reasoning. Most of Brennan's letters to Native peoples were articulated as instructions and lessons, extending the paternalistic reach of school directives out of the school into the community. Yet, it was not the singular act of picking berries that Brennan feared would take the children out of the school and back into their communities, but of picking berries together as an extended family.

The photograph below was published in the 1925 annual report of TIS, with the caption, "Girls picking strawberries." As a part of the Annual Report of the Thomas Indian School to the New York State legislature, the photograph is presented as supposed evidence of the schools' effectiveness in their civilizing project. The strawberry field contains only girls, suggesting that administrators viewed picking strawberries to be a feminizing agricultural task. Thirteen girls are shown harvesting the berries, and very few of them are close enough to each other to converse as they work. The girls all wear long-sleeved cloth dresses, despite the hot summer temperatures that cover the area when strawberries ripen in late June. The girls in the picture are not named, and their faces do

not appear clearly enough to be identifiable by anyone who was not there to remember their picture being taken.



Image 7: Picture titled "Girls picking strawberries," from the Thomas Indian School Annual Report to the New York State Legislature. 1925.

The strawberries themselves are not visible, except for their mention in the caption. The picture was not taken so that family and friends may recognize the girls. These images were included in the TIS Annual Report to the New York State legislature in order to communicate the success of the school in reaching their objectives, in their annual appeal for state funds to keep the institution running. Demonstrating the children doing agricultural labor was meant to prove that the school was fulfilling their mandate of labor-training. Thus, the group of girls in the image are made interchangeable: they are meant to represent a racialized and gendered figure of the "young Indian girl," learning to labor. Picking strawberries as an agricultural task—to feed the school's population, then sell the excess in surrounding towns—was meant to refashion the students' relationships with berries into one resembled that the Anglo-Saxon agrarian imaginary of production for market. In the picture, the strawberry and its socialities are displaced by a settler fantasy that learning to labor and the physical act of labor itself would train and assimilate the children into White American domestic life. The cohesive character of the strawberry as a relation that helped build community is, successfully or not, subsumed by the gendered and racist dynamics of the "civilizing" project of boarding schools.

In addition to this apparent subsumption to the civilizing project, the strawberry itself was being transformed into an interchangeable commodity in this era. The practice of owning land, planting on it, harvesting, and selling excess product on the market is the central capitalist aspect of the American agrarian imaginary. Already, outside of the school Native people were incorporated into this economy only in the most precarious ways. And in the early 1900s, the lives of strawberries themselves were also under careful surveillance in the United States. While commercial strawberries had been grown

in the US since the 1870s, in the 1920s strawberry breeding became the work of federal and state experiment stations instead of individual growers. With the re-discovery of Mendelian genetics, crossbreeding berries for national production promised rich incomes for investors. The New York State Agricultural Experiment Station (NYSAE), which opened in 1882, became part of the state's land grant institute Cornell University in 1923.[69] In 1925, the Experiment Stations published an 826-page document titled, "The Small Fruits of New York," which reported on the species, production, and processing of small fruits including berries in the state. The strawberry is a lead character in the document, which listed new cross-bred varietals that resisted pests, and could be marketed widely—all descendants of the imported Chilean strawberry brought to the US via Europe by a French Army intelligence officer (Hendrick and Howe 1925). Lands that 50-70 years prior were all still Haudenosaunee Indian Country even by US laws, had been expropriated and transformed into farms, roads, and sites of processing centers. Canning factories opened from Rochester down to North Collins, NY: many Haudenosaunee people across Western New York picked berries and other fruits for these canning factories either ad-hoc (paid by weight or piece) or seasonally.

The strawberry was made central to the labor that the children performed at the school that the administrators viewed as part of racially transformative industrial training. The training at the school enforced a gendered division of labor and prepared their students for poverty wage work, like many Indian Boarding Schools across the United States and Canada.[70] Yet the students were not trained in anything more than agricultural labor in the case of boys and young men, or domestic labor for girls and young women. Farm management and sales, which were key aspects of agriculture educational extension through the "Reading Course for Farmers" which began in 1900 at Cornell University, was not part of their curriculum. Nonetheless, TIS students were given a tremendous amount of work to do. Killing pigs, collecting seeds, drawing oats, harvesting, planting, and tending and milking cattle, were all the work of the children. Thus, administrators did not aim to train students to own land, manage a farm, and participate in the agricultural economy of upstate New York. Pronouncing their desire to assimilate the children, the practices of the school would only, if it had been uniformly successful, have assimilated them into a particular classed role in agricultural production. As other scholars of Indian Boarding Schools have found at their sites as well (Noriega 1992; Lomawaima 1995; Child 1998; Jacobs 2009), these everyday training practices at the school belied the loftier stated goals of the school's anti-Indigenous project and process.

Part of the project of TIS as a state-run institution was to end so-called dependency of Indians on state monies and programs.[71] While labor-training was a part of this project, other aspects included cutting students off from their home communities (as the next section will show) and from their lands. When the Thomas Indian school was founded, the techniques of the civilizing project were, as the next section details,

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[69] Today this land is run as Cornell AgriTech station, in Geneva, NY at the head of Seneca Lake.
[70] As well as Bantustan Education in apartheid South Africa.
[71] The cruelty of viewing Indians as 'dependent' on a state whose wealth came directly from Native lands—rather than understanding that colonial violence and dispossession had created a sense of poverty where Haudenosaunee access to lands and former lifeways were throttled—was a norm at the time and defined the so-called "Indian problem."

primarily religious and emerged at a moment of extreme duress. Despite its religious origins, from its inception, the school was entangled in state politics of development and land settlement. Five years after the Seneca Nation of Indians Council's[72] petition for funds for an orphanage on their territory was denied by the NYS legislature, Presbyterian missionary husband and wife, Asher and Laura Wright, secured a $100 donation from Philip E. Thomas who became the asylum's namesake. Thomas was a local Quaker as well as an investor in canals and railroads in the state. For a while, Thomas served as the president of the Baltimore and Ohio Railroad, which had a railroad line going through Seneca territories and a stop at Salamanca on its way north to the city of Buffalo. With confirmation of Thomas' support and donations from the ABCFM, the Wrights were able to secure funds for the orphanage from the legislature that earlier the SNI had not. For the first twenty years TIS ran as a mission-based philanthropic initiative with minor state funding. As New York State became involved in 1875, the records in the archive increased significantly. The workings of state bureaucracy is archived in the forms, case files, superintendent's daily journal, and annual reports.

On these forms in the archive one can begin to see the ways that US colonial processes of land dispossession, and how it was framed through Indian dependence, were woven into the every-day operation of the school. The application to the Thomas Asylum was a one-page form which is available in most of the children's case files. The form allowed space for the name of the child, their parents and their location, their tribe, age, and vaccination history. Boxes could be ticked on a list of both chronic and infectious diseases to denote the child's health: fits of convulsion, bronchitis, spitting of blood, asthma, colic, rheumatism, scrofula, measles, whooping cough, chicken pox, mumps, scarlet fever, and diphtheria were listed on the 1905 application. The application required that parents or guardians of children entered into the school sign off all rights to custody to New York State, from whence the agents of the state were given the authority to shuttle the children between any school or institution. Parents and guardians were not just admitting their students to a boarding school, but transferring their rights to a state department that could move them to any other institution at any time. And the parents and guardians did so—under varying situations of duress and coercion—promising to not ever beg their children to leave the institution. Variously referring to the child who was the subject of the application as "it," "he," or "h___," providing a space for the applicant's guardian to insert one of two genders (him or her), the form was written carelessly yet is quite precise in its ambition. Above a parent or guardian's signature, and below the list of diseases, the 1905 form reads:

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[72] In the wake of the 1838 and 1842 Treaties of Buffalo Creek, with their removals and devastations of Haudenosaunee life, religious societies of Quakers and anti-Jacksonian Whig Party political actors at Albany joined Haudenosaunee people in their efforts to secure greater jurisdiction of Haudenosaunee people and territories. The "Act for the Protection and Improvement of Seneca Indians Residing in the Cattaraugus Reservations in this State" was passed by the New York State legislature in 1845. This controversial act installed an elected chief system with which Euroamerican politicians and business-people would work and negotiate sometimes over the heads of the long-standing Gayanashagowa (Great Law) system of the Seneca and the broader Haudenosaunee Confederacy. For some, this was a survival strategy. The Seneca Nation of Indians, the name of this new colonial and republican form of government, would soon in 1850 urge the New York legislature to open boarding schools on their lands.

> *I also renounce all my rights to the care, custody, and control of such child during the time it is cared for and maintained by such school, or elsewhere, by the State of New York, according to law, or during the time such school or State is desirous of caring for and maintaining such child, and I also waive all claims for any and all annuities, either in money or in goods, and for all moneys due from rents of Reservation Lands, for oil purposes, or otherwise, to which said child, its guardians, or relation shall be entitled to from the date hereof, and during the time said child is cared for by the State of New York.*
>
> *And I further promise and agree not to molest such child or coax, or to entice h___ to leave such school, and in case such child should leave without permission I agree to promptly return h___ hereby intending to and giving to such school full charge, custody, and control of such child, and the same charge, custody and control to such school or institution to which he may be transferred.* (Excerpt from 1905 Application to Thomas Asylum for Orphan and Destitute Indian Children. Children's Case Files, Roll 55. New York State Archives, Albany, NY.)

As the excerpt above shows, the application contained a clause that forced families to relinquish their annuities from the New York or federal governments. Annuities, paid in money or goods, from land that Native people have sold or relinquished as part of treaties are, as Beardall (2018) has described, are the capital derivatives of Native sovereignty, or sovereign derivates. However, these derivatives do not emerge from Native selves, governance structures, or Native relations that form Indigenous sovereignties. Rather, they are derivatives of a Euroamerican settler legal construction of "Indian sovereignty": a construction that is limited by the misrecognitions of a racial state (Coulthard 2007; Goldberg 2002). The annuities emerge from a valuation of land neither as property, nor as Haudenosaunee sovereign territories, but of a US colonial construction of the value of "Indian land": an understanding of value that emerged through the power-laden negotiations between duplicitous land companies, earnest missionaries, a state legislature packed with infrastructure financiers, and a circumscribed portion of Haudenosaunee leadership. Once they had created this understanding of an annuity for Indian land, the state in this among many instances used it, and violated it. Upon application TIS denied the parents or legal guardian the right to the sovereign derivatives of land that has been constructed as "Indian Land" by the laws of settler governance.

Around the year 1921, the wording in the TIS application changed to eliminate the demand for annuities from the child's guardians, yet TIS still took control of the children's own annuities. Throughout its functioning, TIS maintained control of the students' monies and wealth. The children's case files are full of requests for funds written to the superintendent, either from older students themselves, or from family and guardians, that they may spend some of their own money. Illustrating the ways that the political structures of Indian wardship shaped everyday practice of Indian life, the letters are written in a deferential tone: if a child needed a pair of shoes, the current state of their worn-out shoes was carefully described in the letter by their parent or guardian. If they needed mittens, the coldness of the weather was described to justify the purchase. Access

to their annuity monies was thus not only withheld from the child's family, but also give out only upon the discernment of the matron or superintendent. Many letters show that this did not only happen when students were in the Thomas Indian School: students who had graduated from TIS years prior and went on to Haskell Institute, Carlisle Institute, the US military, or even back to their own communities wrote back to TIS administrators asking to spend their annuity monies on basic needs. Without accounting books remaining in the archive, it is not possible to account for where these annuity monies went. As it appears in the archive, the control of annuity monies was another mode of surveilling the students themselves. Ridding students, their families, and guardians, of their supposed 'reliance' on annuity monies was another way that the Thomas Indian School worked to disconnect students from their land here symbolized in sovereign derivative annuities. In other words, not only did the school attempt to dismember the children from their other-than-human relations and their close and extended kinship relations on the land, it cut students off from the colonial constructions of "Indian land" as well. As late as 1947, the school matron, Frances Kinkead, wrote to a mother of a TIS student telling her that if she needed the child's annuity money in order to feed her while she was visiting home, that the child would not be released for a visit. Documents from 1957, when TIS failed and closed its doors, show the institution returning funds which they still held, if students or their families demanded them back.

The administrative attempt within TIS to isolate the children from their land and relations was multifaceted. Denying children's access to the only ceremony held for the strawberry during the short summer break by disallowing visits home, administrators worked to refashion children's' relations to the strawberry by instituting a gendered division to the practices of harvest, processing, and marketing. Jacobs, in her work examining the roles white women played in the removal of Indigenous children in the US and Australia, analyzes how boarding schools were part of an "imposition of new bodily and sensory regimes" (Jacobs 2009, 248). Sabotaging the bestowal of knowledge of the land from Haudenosaunee adults and elders to children that would have been carried forward through bodily and sensory experiences, such as picking berries on the land, "weakened indigenous claims to certain lands, thus making way for colonists to take over any land that still remained in indigenous hands" (Jacobs 2009, 249). Yet these isolations and attempts to disconnect the children from their Haudenosaunee relations and rights were, as this section has suggested, not necessarily carried out explicitly. More explicit and bureaucratized, were the TIS administrator's workings that trafficked in Euroamerican settler understandings of "Indian land," from which students were removed. Having formulated common sense, practical, and legal conceptualizations of Indian land in a previous moment, as outlined in the first chapter of this dissertation, these rights that Native people managed to construct for themselves within a colonial and violent settler legal structure, were explicitly target for destruction in these assimilation era policies and practices. The next section will show how politics of care for the children's health and wellbeing became enrolled in an ongoing colonial project of Native elimination.

Surveillance, severalty, and schooling

> *"…their lands should be held in severalty…With the existing laws but little can be hoped for outside of the institution walls. In the district schools among the pagans (who are the predominating party) the work is particularly discouraging, while the tribal relations are continued. Few of them depend upon cultivating land for a livelihood, but roam about from place to place picking berries, peeling bark, gathering herbs, etc., to gain a mere pittance for support; consequently the children are so irregular in school that they results must necessarily be most unsatisfactory…The severalty act seems to me to be one of the most important steps toward the elevation of this people, supplementary to the present training which they are receiving here."* (Superintendent's Report, in TIS Annual Report, 1888).

When I encountered the berry in the quote above, I began to recognize the power that berries held not just for Haudenosaunee people but also for Indian agents and TIS administrators as well. In the quotation excerpt above, from the 1888 TIS Annual Report, the superintendent writes with disdain about an Indian life of "tribal relations," led outside of a private-property regime and where medicines such as berries, bark, and herbs are gathered from the land to be used by the people, not sold on the market. Picking berries, in this quote, becomes a metonym for Indian life, figured here as simultaneously dangerous, desperate, and alluring. Writing in his annual report to the New York State legislature, the TIS superintendent comments on the importance of privatizing reservation lands, or severalty. The influence and importance of the Dawes Act was a central topic of the TIS annual report for four years. Severalty and schooling were intimately intertwined as policies aimed at addressing what Euroamerican settlers perceived as "The Indian Problem" in upstate New York. Styled in the "positive" eugenic language of racial elevation, both the TIS physician and superintendent suggest that sanitation and health alongside private land ownership by a male head of a nuclear Western family as a solution to this "problem." This section shows how TIS administrators and other personnel enrolled the language of health-making as rationale for their project. This humanistic project of colonial "care" at work at TIS marked Indian bodies, Indian homes, and Indian homelands and reservation lands as sites of disease and degeneracy.

In the public spectacle of care of the school, the *family* was the target and the substance of assimilationist policies, as was the case in many Indian Boarding Schools in the US and Indian Residential Schools in Canada. Colonial performances of morality and order marked the public-facing presentation of TIS. Piatote (2013) shows that while the Indian Wars were coming to a military close in the late 1800s, they continued as a war against Indian families and homelands, or intimate-domestics and tribal-domestics of Indian life. In the context of the Thomas Indian School the intervention of this model of family had been present for some time. The federal shift away from explicit Indian Removal policies arose in western New York at a time when missions were already well established around and in portions of reserved territories. Before the Boston-based American Board of Commissioners for Foreign Missions (ABCFM) spread its missions to Micronesian islands (1852), Southern Africa (1834), West Central Africa (1843), and The Philippines

(1903), they found root in Seneca territories in 1826.[73] Reverend Asher Wright, who would later found the *Thomas Asylum for Orphan and Destitute Indian Children* with his wife Laura Sheldon Wright, came to Buffalo Creek to take over the ABCFM's missionary doings in 1831.[74] Imposing the form of the Euroamerican Christian family was a central mode of the project to Christianizing and civilizing the Seneca in the early 1800s. Baptizing children then giving them Christian names, and performing marriages among the Seneca were key tasks of Asher Wright and other missionaries that took their station in Western New York (Hauptman 2014). Long before the Thomas Indian School became a formal institution, missionaries attempted to impose a model of the nuclear, heterosexual, male-dominated Christian family as an institutionalizing technique. Before assimilation became an express policy of state or federal government, missionaries began this work in communities.

The Thomas Asylum was established on the heels of Indian Removal policies in upstate New York. *Manifest destiny* ideologies of westward Euroamerican invasions rose at the time that the immense monetary costs of Indian Removal policies made removal by another name—assimilation—appear as a progressive alternative, or at the very least, a more 'efficient' approach than whole group removal or extermination. At the time of the infamous and fraudulent 1838 Buffalo Creek Treaty[75], the Whig Party was growing a strong presence, particularly in upstate New York. New York Whigs stood on a platform opposing the violent Indian Removal policies, and the even more violent practices of President Andrew Jackson. Whigs hinged their ideas for Indian policy on their own local agendas of economic expansion in the state. During their active struggle to overturn this treaty Seneca (Onöndowa'ga:'), used their connections with existing missionaries in the area of Buffalo Creek (an area that today includes the City of Buffalo) to their advantage.

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[73] In 1826 the ABCFM took over the previous mission work and infrastructure from the United Foreign Mission Society. The first mission in Western New York in Buffalo Creek territories had been established by the New York Missionary Society in 1802. This was taken over by the United Foreign Mission Society in 1821, and their explicit goal was to spread the Gospel to Indians and "other portions of the heathen and anti-Christian world" (Heuser, 1).

[74] While Asher and Laura Wright stayed in Buffalo Creek until their mission closed in 1846, they worked to appropriate funds from the ABCFM to open a new Mission house and school on Cattaraugus territory. The Christian Indians of Buffalo Creek, who had moved south to Cattaraugus after the 1842 treaty, acquired five acres of land upon which Asher Wright's home would be built. Asher and Laura Wright had learned Seneca and in their new home built a small printing press, all for the purposes of spreading Christianity among the Seneca people. The year she arrived, Laura Wright went around the community to examine the local need for an orphanage and, in her notes, wrote that there were approximately 50 children.

[75] The deeply fraudulent 1838 Treaty of Buffalo Creek was refuted by Haudenosaunee during its negotiations and after. In this treaty, the Ogden Land Company went against both US federal law by circumventing the 1790 Trade and Intercourse Act's ruling that all land deals with Indian tribes had to be overseen by the US Federal government. The Ogden Land Company also went against Haudenosaunee governance and law, negotiating with portions and sub-sections of leadership who they had bribed or threatened to bend their will (Hauptman 2001). In the treaty, the Buffalo Creek Reservation, Tonawanda Reservation, Oil Springs Reservation, Cattaraugus Reservation, and the Allegany Reservation were to be dissolved. Seneca were to be removed to Kansas to a 1.8 million acre tract of reserved land, with the promise that they would leave within five years from the signing of the treaty.

In the four years of negotiations that ended in the 1842 Treaty of Buffalo Creek, in which Tonawanda, Cattaraugus, and Allegany territories were reclaimed by the Seneca, albeit shrunk from their former boundaries, the Whigs and a faction of Quakers called the Hicksites played key roles in aiding the Seneca. By the time the 1842 Treaty was signed,[76] Indian Removal to lands west of the Mississippi came to be a discredited policy at the federal level of government, which was under the executive rule of the Whig Party.

In the wake of tremendous disruptions and horrific loss, the need for an orphanage and boarding school on Cattaraugus was seen, by some Seneca and missionaries alike, as a necessity. Seneca who had been removed to Kansas encountered harsh conditions and disease, and over half of the approximately 190 people who moved died en route or soon after arriving on their unfamiliar Kansas lands. Gaining $500 from local Quakers to help them return home, most remaining Seneca returned back home, with a typhoid epidemic following their homecoming in 1847 and 1848. With access to medicines, established food and water ways disrupted by the slow invasions of the treaty era, many Seneca and other Haudenosaunee children were left without parents or extended families to take care of them. Many of the children that the Wrights took in were either orphans or from families too poor to feed some or all of their children. The provenance of the asylum—as an institution founded with support of some Seneca and established on Seneca land—may at first pass seem as an approval of the TIS administrator's ideals and practices. The trope of the Indian Boarding School experience, in which the children were all stolen outright from their families and sent hundreds or thousands of miles away from them, does not encompass the complex histories that narrate what Thomas Indian School was. The Thomas Asylum emerged at a moment of extreme and immediate duress, and caring for young Native children, a primary and enduring value of Haudenosaunee communities, was at the center of the support from the Seneca who advocated its establishment.

Though it arose in a time of immense need, however, the Thomas Asylum soon became a key locus of dispossessive assimilationist policies. The Asylum came under the management of New York State in April of 1875 in an act passed by state congress, and its residents, or *inmates* as the children were then called, came under the control of the New York State Board of Charities. Soon after this institutional shift, the TIS archives expand in their scope and documentation. The files became part of the state bureaucratic infrastructure, and the children and their lives became documented in a new way. In a private spectacle within the archives, I find that TIS administrators prurient captivation by young Native women's fertility, intimately related to territorial concerns of the state. These spectacles entwined the TIS administrators in the colonial project of assuring Euroamerican settler futures. Keeping children from their families in the name of health and wellbeing of the individual student and of the 'Indian race' was linked in practice to a Euroamerican settler project of not only continued dispossession but also maintaining state territorial governance. Surveilling the students' sexualities under the guise of health-making, in the context of Thomas Indian School, played an integral role in this maintenance. While Piatote (2013) has focused on the way that the removal of Indian children from their families became thinkable through the construction of the white middle-class home—the model for good nurturance—I focus on the moral sentiments of

[76] The 1842 Buffalo Creek Treaty did much to secure lands for Seneca in New York State, but was also advantageous to New York State legislature and moneyed interests.

racial uplift articulated particularly as a public health project. Working through the guise of *improvement* of the Indian child, health and medicine became enrolled in settler strategies of Haudenosaunee land dispossession via assimilation in this colonial regime of apprehension.

In the same year that the superintendent wrote the words quoted above, tying the Indian Boarding School to the severalty of Indian lands, his proclamations reverberated the anxieties of New York state politicians. While New York state policies validated creating poverty through their industrial training, dispossession, and exclusion or adverse inclusion of Native people in local economies, politicians worried about the production of welfare subjects reliant on the state. An 1889 report titled, *Report of Special Committee to Investigate The Indian Problem of the State of New York*, often called the Whipple Report after the committee's chairman James S. Whipple, was a survey of Indian land: cultivation, allotment, surveys, treaties, and other land deals. Research for the report was undertaken following a resolution adopted by the New York assembly the year after the 1887 Dawes Allotment Act was passed at the federal level yet explicitly excluded the Seneca of New York from the Act. The report described the Indian Problem as a "stain of no small magnitude" upon the "fair name of the Empire State", and their solution was to require them to become US citizens, dissolve all Haudenosaunee governance structures, and end their special status claims to land by allotting their land in severalty. In addition, the committee suggested that New York State begin to enforce fines and imprisonment for a particular list of "Indian offences." These ostensible offenses included: participating in traditional dances, plural or non-monogamous marriage, a man being unable to provide for his wife and children (for which rations would be withheld until he could again provide for them), and the practice of Indian medicine. A key anxiety that drove New York state policy at this time, was the worry that Haudenosaunee left landless from practices of severalty would become "dependent" on state aid. "We cannot, as a community, have these Indians let loose upon us as paupers and beggars," reads the report. On the next page, the report's authors name the Indian Boarding School as a recourse, "where the children are withdrawn from the influence of their wild home life" (Whipple 1889, 341).

Yet the racial anxieties of Euroamerican settlers extended beyond the home lives of the children. Presenting his ideas about the purity of what they called the Indian race in upstate New York, a testimony by a Buffalo lawyer and trustee of the Thomas Orphan Asylum, William C. Bryant, was presented as evidence to the case of the Indian Problem in the Whipple report:

> *The Indian is better than he was 100 years ago, and he is worse than he was 100 years ago; he has taken into his life a great deal of white life; and the Indian to-day isn't an Indian, is not a pure-blooded Indian; the only pure-blooded Indian on the Onondaga reservation died about four or five years ago, Aunt Dinah; all the rest are a mixture of Indian and very poor low-white life, that has gone in there for improper purposes; so that to-day the Indian is not a noble red man, and he is not a noble white man; he is a mixture of the lowest and the meanest of the two* (Whipple 1889, 164).

Through a fantastical claim about the racial purity of the Haudenosaunee that they are supposedly surveying, the report reveals the fear that the colonial project is failing—Indians very much remained on the land and had not disappeared as colonial officials had previously thought. The aftermaths of both the spectacular and the slow violences of Haudenosaunee dispossession in the 1700s and 1800s is naturalized by naming it the natural cause of miscegenation. Invoking the metaphor of blood, the concern for Indian racial purity follows in-step with tropes of the time. Appropriating the figure of "Aunt Dinah", the report's authors present her as the "last" pure-blooded Indian in upstate New York. Dinah John was an Onondaga, Haudenosaunee woman known to white upstate New Yorkers as "Aunt Dinah." She was frequently mentioned in Syracuse and other central New York newspapers due to Euroamerican settlers' fascination with her advanced age: she died in 1884 at the age of 109. As O'Brien writes (2010), the memorialization of Indians serves as a process of historical production which justifies Euroamerican settlement. This memorialization, in O'Brien's analysis, happens in three moves, with a key move being what she calls "lasting," or using narratives of blood and race to make a claim that true Indians no longer exist. Though the mention of "Aunt Dinah" may stand out in this report as an out-of-place anecdote, the committee members who wrote the report to figure her as the last true Indian, revealing the deep anxieties that Euroamerican settlers had about the ability of contemporaneous Haudenosaunee peoples to reproduce life, lifeways, and claims to land. By appropriating her image in the familialist terminology of "aunt"—a matronly elder family member past the age of sexual reproduction who was imagined to be the last full-blooded or true Indian in upstate New York—the committee manufactures their seizure of Haudenosaunee land as a familial inheritance, neutralizing the violent dispossessions of the Clinton-Sullivan Campaign that Dinah John would have herself lived through as a child, and the treaty-making era that followed.

The committee also employed the idea that Indians once in "contact" with White "civilization" would degenerate, weaken, or lose their moral standing. This concept had gained purchase during the assimilation era, becoming common sense.[77] At Thomas Indian School, this theory was also propounded by the TIS physician:

> *I cannot too strongly commend the thoroughly systematic and effectual sanitary management maintained by the superintendent and matron of this institution…It seems to me we must look to such means, together with proper bodily training, such as is also carried out here, for the physical regeneration of the descendants of the feeble and degenerating Indian race. With them there is a most decided tendency toward those forms of disease which are always the accompaniment of the encroachment of the habits and modes of life of civilization upon the customs of a savage people* (TIS Annual Report 1890, 15-16).

These words were written by the first in-house doctor at TIS, who was hired in 1877, Doctor Albert D. Lake. He was first hired the year prior by Daniel Sherman, the United

[77] As the next section will show, this figuration of Indianness became refashioned in biomedical and public health research in the Termination and Relocation era of the 1940s-1970s.

States Agent for New York Indians, or Indian Agent, working for the federal Office of Indian Affairs. His original post was to serve the Haudenosaunee in their reserved homelands across New York State, with funds provided through the federal government. However, there was disagreement in the state legislature about which pot of funds Dr. Lake's salary would be drawn: federal funds or Seneca annuity monies. New York State legislators did not consider it the responsibility of the state to provide generalized medical or public health assistance on tribal lands. The next year the question of Dr. Lake's salary was settled when it was decided that the New York State Board of Charities would hire him, part-time, to work at TIS. Dr. Lake's sole effort came to be his work at the Thomas Indian School (Hauptman 2014). During his 45-year tenure at TIS, Dr. Lake served as both a physician, a quarantine manager, and as a general public health advocate for the school. Each year in the Annual Report written for the New York State legislature, required for the school to continue to receive state funding, there is a 1 - 5 page section written by the on-site physician. These reports, from the years 1881 to 1942, are available to the public to view at the Buffalo Historical Society in Buffalo, New York. Within these reports are suggestions for public health-based improvements to the school, commentary on disease and death rates, and a table listing deaths, cause of death, disease counts. The things he advocated for in the annual reports include: boilers for a better heating system, new dormitories to prevent crowding, greater ventilation in the dormitories, more light and safer equipment in the carpentry facility, a gymnasium, a sewage plant, and larger medical facilities.

His efforts to promote the health of the children, which he catalogued almost yearly into the TIS annual reports, was argued through his framework of a civilizational hierarchy of races, in which he thought the children inhabited a lower place. In the 1915 report, for example, he argues for a gym, writing, "[t]he change in the mode of living among the Indians, which has come with civilization, has weakened them physically and they have a special tendency towards weak lungs. Training of this sort would correct these weaknesses."[78] In this argument, Dr. Lake naturalizes the violent dispossessions and displacements of colonialism by calling it a process named "civilization," and claims that the gym would help remedy what he imagines are inherent weaknesses that colonial violence has instigated. In his tenure as TIS doctor from 1877 to 1922, nearly half of the years that the school was functioning, Dr. Lake's stance on the racial weakness of Indians remained consistent. He believed that while a racial hereditary weakness defined Indian fitness, the work done in the school to improve sanitation, health, and habits would mitigate these supposed hereditary issues. As early as 1881, he had adopted ideas that became prominent during the American eugenics movement: "many of the children come here with a taint of hereditary disease, which, under more unfavorable environments, would develop into serious, and, in many cases, fatal sickness." (Annual Report 1881, 14). In an 1886 report, he claims that by taking in the children at a young age and keeping them until they were sixteen years old, they leave the Thomas Indian School with, "a fair prospect of immunity from those diseases which are so surely exterminating their race" (TIS Annual Report 1886, 12). Lake's embrace of racist civilizational discourse common at the time, about a supposed weak Indian constitution, guided his racialist practices and

[78] Thomas Indian School Annual Report (1915, 21-22). Buffalo Historical Society archives. This largely foreshadows my analyses in the following chapter.

policies at the school. The children were thus subjected daily to bodily regimes meant to improve them racially.

In his "health advocacy" for the children at the school, he does not request money from the New York State legislature for improved conditions in reservation communities, or for training Native doctors. Requesting more money for taking in more children, Lake's *physician's report* in 1885 bemoans the use of Haudenosaunee medicines on sick children who were taken back into the community by their families when they seemed close to death. He writes, "the little sufferer has been removed from a comfortable home where all of his wants have been fully supplied to, in many instances, some place of squalor and want, where the natural sufferings of the disease have been vastly aggravated, and the few weeks of life left to them filled with misery" (TIS Annual Report 1885, 13). Lake's inability to imagine why a family would want to see and care for their child in the last weeks of his or her life, or that a child may find comfort in their family's care, displays the antipathy he held for Indian families. The superintendents followed through with this thinking in their policies throughout the schools' operation. On June of 1933 a grandmother wrote to the superintendent, Mr. Brennan, to ask if he may release her granddaughter for the summer, writing, "we like to have her used our old Indian medicine while she be home with us, Please." A day later, Brennan responds denying her request, stating that the granddaughter's condition "is improving but she needs to be very careful. She is constantly under the Doctor's observation." The child's mother wrote in response, pleading that she be let home. Brennan refused again. Their child died sixteen days later at the school.

In this dual focus on family and health, the administrators were particularly captivated by the fertility of the Haudenosaunee girls and women who attended their institution. In the 1895 report, the superintendent makes the suggestion that young women be removed from the institution by the age of thirteen. He justifies this recommendation:

> *...the fact that both sexes are there cared for, renders the presence there of girls who are approaching the age of womanhood a constant menace to the welfare of the institution and of the state.* (TIS Annual Report 1895, 9).

The superintendent suggests that the presence of young Native women reaching the age of fertility is a menace to not only the institution but the entire state's wellbeing. Young Native girls are located as a threat in his analysis, which names her imminent ability to sexually reproduce as a threat to the school and to the settler state. Thus, the young Native women's bodies became the geographical site of discipline and a key scale at which settler surveillance of Indianness was enacted. One published interview with a TIS survivor reads, "[s]ome boys went by the building and us girls were laying down on the lawn. They hollered to us and we hollered back. We were just joking but the matron came running out and she accused us of nasty things. Everything we did, those single matrons thought it was sexual, I guess" (in Austin 1990, 96). TIS administrator's captivation with the threat of young Native's women's sexuality shaped the practices at the school. Noreen Johnson-Shongo, a survivor of Thomas Indian School, spoke about this captivation in the documentary *Unseen Tears* (2008). "If you got caught sitting on the ground or holding hands with a boy you had to go see the doctor. They were all the time

checking to make sure everybody was a virgin…he wanted to know if you had intercourse or not, you know. Every little thing sexual they were always checking on us." Surveilling the sexuality and gender practices of Native women is a practice that has been integral to Euroamerican settler governance across the United States.[79]

As the superintendent's quote above suggests, Native women's fertility was not imagined as a threat to the student's education or wellbeing, but to the entire institution and the state as a whole. The power of Native women's fertility, and its entanglement with the future of the settler state can be understood by contextualizing them with the theories of Lewis Henry Morgan. Morgan, a lawyer, member of the New York State senate (1868 - 1870), and so-called father of anthropology, began his career's study of social theory in upstate New York, and his first book was titled "League of the Ho-dé-no-sau-nee or Iroquois" (Morgan 1851). In this book, he made a science of the settler common sense idea (see Rifkin 2103) that Native peoples and particularly the "Iroquois" were a vanishing racial group, a trope that became the raison d'être of anthropology as a discipline for the next century. Morgan was a man well-known to philanthropists involved in Seneca territory, as he attempted to make a name for himself in these circles. His ethnological work on kinship, the state, and private property both lay out "a process of naturalization by which native-born settlers root themselves in the colonized land and nationalize it," (Ben-Zvi 2003, 226), but were also rooted in the settler politics of where he called home: upstate New York.

Morgan's famous and influential book, *Ancient Society,* was published in 1877 and outlined his theory of change over time, which was a racial stagist metanarrative that spanned from savagery to barbarism to civilization. Morgan's work crystallizes the tropic concept of US exceptionalism is a supposedly rightful inheritance of land and wealth from "American aborigines," and presents Native American people as the socio-evolutionary ancestors of Euroamericans or "Saxons" as he calls them: ideas that are echoed explicitly in the Whipple Report. The *vanishing Indian* paradigm that early ethnologists made into science drove the policies of federal boarding school programs (Baker 2010). In Morgan's conceptual framework he suggests that private property, particularly *land* and *home* as private property, was a necessary feature for a society to develop a sense of dominion over territory that the nation-state form required. Morgan theorized that societies without private property—namely the matrilineal clan systems of the Haudenosaunee—were of a pre-political status of barbarism that nullified their sovereign claims to land as territory. Morgan reasoned his theories in this way *because* he was wed to the common myth of the vanishing Indian, as were the authors of the Whipple Report and many TIS superintendents. These ideas were also propounded by the judge for the town of Randolph, NY, who was invited to speak at the 50th anniversary of TIS. He professed that, "[d]ame nature is imperative in carrying out her own plans…As the Indian can hardly hope to absorb our 80,000,000 of whites, it follows that he will be merged and become a citizen" (TIS Annual Report 1906). Nostalgia for the disappeared

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[79] See Child (1998, 38) for an analysis of how similar practices, namely monitoring the girls' menstrual cycles, were practiced by the matrons at Haskell Institute and the Flandreau School in an effort to deter sexual activity in the young women. See Miranda (2016) for an account of the ways Indigenous womens' sexuality was surveilled and policed even earlier, in California's missions.

"noble red man", as quoted in the Whipple Report above, was a stretch of a settler imaginary that was naive to the Haudenosaunee governance, languages, geo-political practices, and lifeways that still existed on the lands that Euroamericans considered settled.

On the one hand, the project of assimilation in practice at the Thomas Indian School was predicated on the belief that Haudenosaunee would not continue to govern their land as territories in the future. On the other hand, the school was an active progenitor in policies that would attempt to ensure this would be the case. Many of these policies were part of a spectacle of care that circulated publicly: in the annual reports, in newspaper articles, and in speeches and presentations given on their philanthropic efforts. In the archives of the Thomas Indian School, a private spectacle emerges for the researcher, of the TIS administrator's abusive and libidinous preoccupations with Native young women's sexuality, controlling the children's mobilities through their homelands and their kinship relations via the affective performance of care for the children's health. Beyond making policy suggestions in the annual report, the TIS administrators were limited in the influence they could have on state policy. However, the practices of quarantine, discipline, and containment they effected at the school were shaped with their concepts of Indian degeneracy and decline, and entangled in the territorial project of Euroamerican settlement. As this section shows, medicine and health were weaponized within this colonial project to keep the children away from their families and lands, and to control their fertility and sexuality.

The girls and the boys at the school were kept entirely separate from each other at all times. One graduate told me that his sister was at the school at the same time as him in the 1940s, and he didn't even see her once over the span of three years. The fear that young Native people may have a relationship was as much a captivation with sexuality as it was a way to keep family members apart. Controlling young Native women's sexuality, however, went beyond keeping the young men and women separate at the institution or withholding love letters written to the students from lovers that the matron or superintendent disapproved of. The medical records in the archives suggest that Noreen Johnson-Shongo's experience spanned the decades that the school was running. The girls and women at TIS, once of menstruating age, were subjected to hymen checks every time they returned from visits or work outside of the Thomas Indian School campus. This practice may appear as a concern for the young women's moral standing via their conscription as "virgins." However, the practice also underscores the fear that the young women may be reproducing more children in their matrilineal lines, creating further generations of Haudenosaunee children who may unsettle the aspirational assumptions of US colonialism: that true Indians have died off and their governance systems have extinguished. Throughout the institution's running, the presence of the Haudenosaunee matrilineal system was a constant concern, and implicitly marked as a threat to administrators. At the school's beginning, Laura Wright's presence was understood as a tactic to extend the missionary reach to the influential Haudenosaunee women with whom they worked. Feminizing labor, such as picking and processing berries, sewing, cooking, and housekeeping were intended to train young Haudenosaunee women away from their roles as leaders, agriculturalists, or healers. In the school's hospital, the security of the settler state, in the imaginaries of TIS administrators, was kept intact through the sexually violent surveillance of young Haudenosaunee women's most

intimate areas of themselves. The care of the settler state at TIS was mistaken for the care of the children through the construction of a white Anglo-Saxon morality. Stoler's (2010) study of the archives of Dutch colonial rule in the Netherlands Indies suggests that uncertainty and fear, as affective states rather than reasoned judgement, governed the practices of and policies of colonial agents. The practices of surveillance that marked this regime of apprehension that children at the Thomas Indian School were subjected to was governed by a captivation with the influence and potential that formed the lives of young Haudenosaunee women.

Over half of the letters that deny visits home that I reviewed in the archives named threats to the children's health as the primary reason they are not allowed to leave the school. Many of the superintendent's justifications were as vague as having heard that there may be smallpox on the reservation (1936 letter, Roll 38), or just a general prevalence of illness on the reservations. A 1910 response to a mother asking for her youngest son to be returned to her refuses her request based on the disbelief that she is fully cured from her illnesses that caused her to send her child to TIS in the first place (Roll 55). As evidenced above in the letters requesting that a dying child come home to take Indian medicine, the children's families understood their homes as places of love, care, and healing. A 1906 letter from a mother asks that her daughter Lorraine be allowed home because she heard she had come down with consumption. Lorraine's mother wrote, "I just like to have her treatment at home before she is to [sic] far gone maybe she would get better and when she'll get better she can go back" (TIS Children's Case Files Roll 55). A large number of these denials also name the two-week quarantine the children were subjected to upon re-entering the school as a reason to not allow them home. The time spent in quarantine, various superintendents reasoned in their letters to the families of the children, would intrude upon the children's education. It was policy at TIS that for a full two weeks, children would be isolated with other returning children inside the hospital building before they would be allowed to return to their work, classes, and friends. The in-house doctor explained the practice of quarantine in the annual report, claiming that it would protect the children within the school from any diseases that children had contracted when visiting their families and home communities. Imagining the Haudenosaunee family, home, and community as a space of disease and illness, the superintendent made clear to Haudenosaunee families his belief in the practice of quarantine and what his assessments of Indian health were when he wrote back to families justifying the practice.

When families were involved in sending their children to TIS, many were aware of the school's tendency to hold the children for sometimes years without a visit home. The processes of individualizing the children, in an attempt to make them productive, healthy, members of society was grounded in the attempt to sever them from their social and Indigenous kinship relations: those that were perhaps even just one mile away. This anti-Indigenous, racially segregated life of Thomas Indian School was produced through a paternalist and coercive type of care. One Haudenosaunee mother wrote a hesitant letter to the superintendent in 1921, asking if she chose to place her two boys in the school if they would be allowed home for the summer to help with haying and harvesting. Detailing the abuse that the boys' father submitted them to, she described her dilemma in having to choose between relieving her boys of their father's violence or being unable to complete the family's farm work on their land that year. The superintendent wrote in

response, "[w]hen you commit your children to the school, it is with the understanding that the school has absolute control over the children," (Children's Case Files, Reel 55), and he told the mother dismissively that whether the boys are allowed home at all is dependent on their good conduct through the year. Against the claim he made in the annual report a few years prior that he wished TIS students to be able to aid their families to become productive agriculturalists, in practice the superintendent prioritized keeping students at the school away from their families, homes, communities, and lands.

Captivation: case files and memory

> *"we lost family—the whole sense of it—and are trying to regain that again."*
> – Dr. Lori Quigley (2019), Seneca

In the last few years a coalition of four Indigenous organizations based in the US and two individual tribes have submitted to the United Nations to call on the US to, "provide a full accounting of American Indian and Alaska Native children who were taken into government custody under the US Boarding School Policy, and whose fate and whereabouts remain unknown" (BoardingSchoolHealing.org)[80]. Citing the children's unknown whereabouts as a violation of both the UN Declaration of the Rights of Indigenous People, and as falling under the UN definition of genocide, the coalition aims to raise awareness about the issue as much as gain acknowledgement from the US government. The United States is far behind in accounting for the boarding school project when compared to the advocacy and legal work done in Canada in regard to Indian residential and day schools. But the very practices put in place to reconcile with this history—of legal testimony and trauma therapy—have themselves been shaped by colonial institutions and discourse. In Dian Million's critique of the institutionalization of the narrative of trauma produced by Canadian Indian Residential Schools, she shows how those who are conscripted into the workings of "historic trauma" discourse are, "positioned by its narratives to return to the site of the crime in order to legitimate their claims" (Million 2006, 268). As advocates in the United States continue their work to bring justice to the crimes of Indian Boarding Schools, these lessons are key to take into consideration. The practice of collecting interviews with graduates and survivors of the Boarding School system remains important. However, they need not be the only way that one can understand the way that power works, and the injustice, violence, anger, and grief brought into the world by these schools. In this chapter, I have limited my use of interviews and instead returned to what remains of the scene of the crime in the archives. For those of us who encounter the archives of Indian Boarding Schools searching for ourselves, or our families, the case file is now how we encounter the children, their subjectivation, and often their pain.

There are times when the overt callousness and anti-indigenous racism of TIS administrators comes through in the archives. The superintendents and other agents working for the Office of Indian Affairs in the region or other non-Native interlocutors were often more candid about their assessments of the children in letters written each

[80] https://boardingschoolhealing.org/advocacy/un-filing-on-missing-children/

other, than they were in letters written to the children's families. Helen Wayne's letters and reports, as shown above, are consistently disparaging and racist towards the children with whose well-being she was charged. Other assessments were more subtle in their constructions of anti-Indigeneity. In denying a child named Agatha be returned home in 1940, superintendent Brennan wrote to a board member regarding his decision to deny her visit home. In the letter, Brennan claims that he has read Agatha's family's social welfare report, and that he has decided that because the child's father has rheumatism and cannot work and support his family, that he should not be allowed to have his daughter at home with him. He writes, "in view of the facts stated above it would simply be adding another one to the relief roll" (TIS Children's Case Files, Roll 16). Back with their families, Brennan imagines, the students would be made reliant on the social welfare system, continuing their so-called dependence on the state: a "dependence" that Euroamerican settlers both anticipated and resented, despite the enormous amounts of wealth generated from colonized lands and resources. Throughout Agatha's case file, five different letters from various family members request her return home: to be with her father, to spend Christmas together, to spend time with her sick grandparents, or just to be together over the summer. Every single time, her visits are denied by Brennan. During the Christmas of 1938, however, Agatha did manage to run away from the school to be with her family.

As superintendent, Brennan overstepped his position even in the eyes of a Seneca TIS board member, in order to maintain control over the children's movement. In a January 1940 letter to Brennan about Agatha's denied visits home, the Seneca board member chastises Brennan's overstep with a claim of sovereign Seneca jurisdiction over the school and the children in it. He writes, "I would recommend that the Thomas Indian School should have a better system as regards to the length of time the children's entrance should expire. In other words, it is too much dictating business which is in violation of law and treaty because the Indians are a sovereign nation, as I have already recited" (Roll 16). By the end of 1940, the requests of the family and the Seneca TIS board member had still been denied, and Agatha was placed as a live-in-maid in a white family's home near Fredonia, New York, as was common practice for young women after graduating from TIS. For the young women, this was often an experience of even more extreme isolation: not only were they kept from their own families, but also from the friends they had made at TIS (Quigley 2019). In a November 1940 letter to Brennan, the lady of the house near Fredonia admitted that she has opened and read Agatha's mail. One letter to Agatha enclosed news from her family who wanted her to leave the home and return to them "in the worst way." She writes to Brennan, "[o]f course, such a trip is out of the question and I'm debating whether to disturb Agatha by giving the letter to her. What do you advise?" A week later Brennan responded, writing, "I would suggest that you destroy the letter regarding Agatha's return home. It would be very unwise for her to go the Reservation" (TIS Children's Case Files Roll 16). Children such as Agatha were placed in isolation from friends, family, and even from hearing news that their families loved them and wanted them home to be together. Despite the Seneca board member having vouched for Agatha's family, Brennan denies her visit again.

The seeming passivity or neutrality of the case file lies in its formulaic guise. The application, medical, and educational forms were pre-printed with blanks to be filled out for each child, denoting a fungibility between the children. Each child was meant to be

represented, and thus become measurable and manageable within the forms that made up the case file. Individuated in each file, their bodies and familial situations would be made collectable, and would be made comparable: to be made into trends and statistics about the nature of Indian children, however badly counted, as the previous section has shown. Anyone reading those forms who does not know a broader story of the person whose file they are reading can only, then, encounter a particular set of information about a child, or attempt to amalgamate stories into trends to tell particular stories. Through the case file, TIS administrators create a notion of a 'type' of child: the Indian child, and in particular, the Haudenosaunee child. Each child's case file documents particular aspects of a single individual life. Designating each child as an object of a 'civilizing' project, the figure of the Indian child in the case file is disconnected and individualized. The TIS administrators created measurable, and systematic information on a portion of the Indian population that appeared as the greatest threat: the children that may carry on their relations with kin, land, and more-than-humans, as Haudenosaunee people. The data about reservation land as a space of disease, immorality, and state dependence, is presented as 'truth' about Indian land in the archive. Reduced into data points and suspended on microfilm, the case file document that one might encounter today in the archive embodies a projection of the imaginary, rather than the real (Vismann 2008). The case file does not describe or subsume the child. Within the ritual of order that the case file itself as a genre denotes, lie a series of forms and documents that identify the children in particular ways. Of the vast array of points of information or identifiers that could be in there, the TIS administrators chose particular ones. These chosen points of information or identifiers, as this chapter has shown, have ramifications for the afterlives of TIS and for how we encounter the children in the archives.

The children, and the adults they grew up to be, did not submit to this technological regime of identification, as its subject or as its object. When one Cayuga mother, Alma, died of 'fever' in 1928, the father appealed to the superintendent of the nearby Tunessassa Quaker Indian School to help him enroll two of his children to the Thomas Indian School. The Tunessassa superintendent wrote in his notes that the father was greatly upset over his wife's death, and that he had stayed up many nights with her as she died just weeks prior. Still owing $10 to the local doctor for her examinations, the father was only able to care for two of his four children and was forced to make the decision of which two children to send into TIS. His impossible decision—with all of his choices for action constrained by the colonial state leaving with none of them adequate—was superseded when all four of his children were taken from him, their aunt, and their grandmother, by the state. Three of his children, including Elsa, were committed to the school by local Judge Black, on the request of the regional Supervisor for Indian Welfare, Helen Wayne. One of his sons was sent to another institution. As with any child for whom the department of social welfare or a local judge was involved in their committal to TIS, their files are particularly long. In such files, letters exchanged between various administrators of TIS or of various Indian affairs offices attempt to diagnose family situations. Reports by welfare agents and psychological examiners ventured to diagnose the mental capacities of the individual children. One of Alma's daughters, Elsa, was taken into Thomas Indian School when she was nine years old, in August of 1929, but her committal didn't go through until four months later. While paternal neglect was the stated legal reason Elsa and her brothers were institutionalized, two other caretakers lived in the

house with them after Alma had died: their aunt and their grandmother. Providing care outside of the nuclear Christian family, extended family members were not considered legally legitimate carers of the children. Elsewhere in Helen Wayne's files, she "charges" Elsa's aunt with having a child out of wedlock, and her grandmother with an unspecified cardiac condition. Elsa ran away multiple times from the institution to return to her aunt and grandmother.

The narrative of Elsa and her family that their case file assembles makes clear the symptoms that the administrators saw as a problem to diagnose. Non-nuclear, extended family networks of care were diagnosed as aberrant, despite living under the same roof. Signs of so-called poverty, such as a lack of mattresses or a presence of flies in a home, were noted by social workers as a lack of care for the children on the part of their families. In Elsa's case, her grandmother's reticence to accept medical care or allow Indian Agents into her home itself was interpreted by Helen Wayne as a sign that the entire family was "ignorant and subnormal."[81] The power of Wayne's assessments, however cruel or blind to the family's situation they may have been, allowed such judgements to become part of the case file's order, and informed how the children were treated at TIS. Three years after her committal, Elsa was subjected to an IQ test, a common practice at the time. The examiner wrote that Elsa was "so handicapped by foreign language difficulty and limited training that examiner does not feel I.Q. obtained should be considered highly reliable." Elsa was more fluent in her Gayogohó:no (Cayuga) language. The memories of other Haudenosaunee people who knew Elsa, however, confound these case file capta. While her case file suspends her story within the judgments of social workers and psychological examiners, she has been remembered by those in her community as someone who defied the draconian rules and regulations of the school and continued to speak her language (Austin 1990). Enduring punishments that publicly singled out the students who spoke their language to shame them in front of their peers, in an attempt by the matrons of TIS to instill a sense of shame for being Indian, students such as Elsa did not submit to this form of disciplining, nor did those who observed it and spoke out against it decades later. Elsa's proficiency in and tenacity to speak the Cayuga language, and perhaps also the Onondaga language, confounded both the IQ examination and the school's disciplinary tactics.

The authors of the archives of Thomas Indian School are the children's failed witnesses (Hartman 2008). [82] They are the men who took their physicians' notes, the matron who typed letters to family refusing a child's visit, and the superintendent who wrote reports to the New York State legislature every year assuring them of the school's

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[81] Helen A. Wayne, Supervisor of Indians, October 1, 1929 report. Children's Case Files, Roll 99. Thomas Indian School. New York State Archives, Albany, NY.

[82] Saidiya, Hartman. "Venus in Two Acts." *Small Axe* 12, no. 2 (2008): 1-14. Pg. 2. Hartman returns, in this article, to the figure of the Black Venus that she had not written into her previous book, *Lose Your Mother*. In the article she returns to the "untimely" stories of black women who survived the middle passage and for whom the archive of slavery itself is a death sentence, yet whose lives grab hold of the present. The witnesses to the lives of these women have failed because the few words that appear to be about the women that do exist are about a commodity and an object, not about their lives or their being. If Hartman's failed witness's words collapsed black women's lives into descriptions of a commodity, the Thomas Indian School's failed witnesses collapsed Haudenosaunee life into the categories of property, family, and health.

success in their project of dispossession via "racial uplift". Despite their many failures—they were failed witnesses, failed care-takers, and failed assimilationists—these actors had influence on the children's lives, and on the children's descendant's lives. Keeping students from their kin and relations is a textured and multifaceted story of separation, isolation, and abject loneliness. Among graduates and survivors of Thomas Indian School today, there is dissonance in appraisals of the institution. My interviews, and other collected stories, reveal how senses of gratitude, regret, pride, rage, ambiguity, and shame animate various memories of the school. Archival documents suggest that criticism of the school if voiced by the children was sternly punished by TIS administrators.[83] Even with the messiness and variance of memories, Thomas Indian School remains a project at the heart of colonial practice. Those raised by mothers and fathers and grandmothers who went through Thomas Indian School live with, and against, the effects of the school.

"Grandma would put kerosene in our hair once a month just to make sure we didn't get lice." Yesęnaru'hčręh Wendy and I sat at a table eating corn soup and slurping milkshakes at a food truck that sits next to a corn field in the Sakru':rę' (Tuscarora) Nation territory, which sits just two miles from the US occupied side of Niagara Falls. She was raised by her Grandmother, who attended Thomas Indian School. "And we got regular enemas, even if we had no problems. She raised us, but never hugged us or kissed us. She raised us just like they raised her there at the school." Wendy is a retired nurse and member of the Tuscarora Nation. She'd told me this story of lived, felt intergenerational trauma and grief before, but this time we had a recording device sitting between us. To her knowledge, there's not one house in the Nation's territory that doesn't have a family connection of some kind to TIS. Like Wendy's analysis, Lori Quigley's work on the Thomas Indian School centers on the way Haudenosaunee families were fractured through the practices of the school, and centers the lessons of the Good Mind, *Gaiwiio*, to replenish those relations. The half-hour documentary, *Unseen Tears: The Native American Boarding School Experience in Western New York*, was released in 2008. It brings together the stories of the Thomas Indian School and of the Mohawk Institute in Brantford, Ontario (1831-1970), which my grandmother attended. Children who went through the boarding schools, the survivors and descendants discuss in the film, learned harsh punishment, how to run a home like a military institution, and the

[83] For example, in a 1906 "Memorandum of Conversation" with a student, the matron Mrs. Lincoln chastises him for "grumbling" about the quality of the food at the school and that his sister was sent to work while she was still sick. Mrs. Lincoln recorded in the case file her own lecture to the child: "How much [sic] it cost to take care of her when she was sick? If she had been home she would have been in her grave by this time…The state isn't making any charge for what it is doing for you. It is given to you free – as free as the water that runs in the brook…You haven't earned the right to come here…you haven't done anything in the world that would entitle you to demand the State to furnish you with $200 a year, have you, Robert?...A great many Indians think that the State must do this for them and do that for them…Now the State isn't finding any fault with the money that it spends. It is doing it cheerfully and gladly, but it does not like to have grumbling about it and it is not manly to do it either…" (TIS Children's Case Files, Roll 3.)

tenderness of childhood was impossible when, "an institution was [their] parent." Reckoning with these direct pains[84] is the work of generations.

After the 1934 Indian Reorganization Act, which caused a revamping of policies at other Indian Boarding Schools across the United States, the Thomas Indian school was left unchanged. The 1928 *Meriam Report: The Problem of Indian Administration*, which excoriated the dual policies of severalty and Indian boarding schools as a problem of bad bureaucracy and lack of data, at TIS led only to a rise in the number of recorded data points, forms, and note-taking on each student. Case files after the mid-1930s expanded, though practices did not improve. Many people I have spoken with have suggested that, in fact, TIS administrators dug in their heels and became even harsher after the Meriam Report suggested broad reforms. For example, while proper ventilation and overcrowding were a key aim of restructuring at other boarding schools, at TIS as late as 1946 the Director of Indian Education toured TIS and wrote in alarm of the metal bars on the windows, placed to prevent children from running away (Quigley 2019). As assimilation came to be rebranded within the narrative of salvage (see the following chapter), Seneca ethnologist Arthur C. Parker initiated a 9-year program that ran from 1934-1942, funded by the Works Progress Administration (WPA) and housed at the Rochester Museum of Arts and Sciences in Rochester, NY. Using the Euroamerican settler interest in salvage to fund and promote his and his community's interest in resurgence, Parker involved Tonawanda Seneca artist, Ernest Smith, who over the course of six years created paintings of Haudenosaunee and Seneca stories, histories, dispossession and violence, and everyday practices. Smith did so in the medium of Euroamerican artists, using canvas and oil paints to create 116 paintings in total.

I analyze this painting here at the end of this chapter as an example of the multitude of ways that Haudenosaunee people have found to honor their pasts and carry them into the future. It would be easy to simply critique Smith's paintings as self-essentializing: as work created purely for a Euroamerican gaze to fulfill the requests of the WPA. Miranda (2016), re-analyzing interviews of an Esselen-Rumsen Native woman to an ethnologist, notes the ways that Native people have been able to use ethnologists to deposit stories and instructions for future generations. I analyze this image to remind readers that the peoples whose pain and subjectification is here named in this chapter have their own medicines, which thrived even as TIS was still functioning. Out of Smith's 116 paintings, three of them depict berries. The one shown below is titled, "Picking Wild Strawberries," and was painted during this period.

[84] The many abuses of the TIS administrators and personnel—psychological, sexual, neglect—are named explicitly in the film. The stories are of deeply abusive traumas, and I have chosen not to re-narrate them here in this dissertation. The half-hour film is available here: https://vimeo.com/76653540



Image 8: "Picking Wild Strawberries." Ernest Smith, 1934-1942. Oil on canvas.[85]

The strawberries, prevalent across the canvas, burst with fecundity. This image makes explicit the cultural reproduction of Haudenosaunee lifeways through generations. In the upper-left hand quadrant, a woman who one may assume to be a mother or an aunt holds a basket heaping with red strawberries. At the knees of who may be a father or uncle, a larger basket of bright red berries sits, partially full, with room for more. At the center of the painting, with all attention drawn to it, is a strawberry held in the hands of the man, as he shows it to a young boy. The young boy holds his own strawberry in his right hand, with his left hand overflowing with strawberries. At their feet and knees, the ground is dotted with more bright red strawberries. Showing the strawberries in the hand of every person in the painting, and strawberries laying full and growing across the ground, allows the strawberries to connect and bring together the families with those lands they live on and with. The lack of an explicit background or landscape behind the figures in the painting, as the image is painted against a white background, figures the wild strawberries and their runners which would be connected underground as a fourth personage in the painting. For the Haudenosaunee, the strawberry is the first berry brought from the sky world to the earth with Sky Woman, who birthed the people living on these lands. They sweeten our presence in our lands and offer sustenance and health throughout the year: in the summer when they grow, and in the winter when they are eaten in dried cakes. They are celebrated and thanked every year in June, as they let us

[85] Rochester Museum and Science Center digital catalog.

know that summer is coming. Depicting a man and a woman teaching a young boy to pick wild strawberries, the painting undoes the gendered strictures of Euroamerican settler concepts of labor. With both a male and female figure guiding the young man in his efforts, the painting conveys how the teachings of the wild strawberry continue to be passed down through generations. Though meant to be an image for the non-Native gaze, this image belies the salvage period of its creation by depicting the intergenerational flourishing of Haudenosaunee kinship and relations.

So many stories of these medicines and of well-being, or of pain, or of kin and family, and of bodies, flesh, and organs cannot be told by the archive. The case file is not meant for them as these stories reside outside the metrics of the case file. These are the stories of the hearts of Indigenous grandmothers or fathers or aunties that ached at their inability to feed their young ones anymore and so sent them to TIS. Or they're the stories of the tiny tongues that curled, dignified and maybe furtively around the sounds of their Indigenous languages when the children ventured to the other side of Clear Creek. Or the tongues that stood still. They're also the stories of guts twisting with loneliness in the homes of rich Euroamerican settler families, in which young girls were sent to live while they cleaned, served afternoon cocktails, and entered only through the back door.

Interlude III

Indigenous survivance vs. Thrifty genes

Our ancestors lived fat
and happy enough to pass on

storage technology that beats
zipper lock plastic,

pads us belly, hip, thigh.
Hard to thank them for this gift

though they gave us luck, too.
Spiral of fate, chain of code,

luck genes must match up
with thrift there somewhere.

- excerpt of Heid Erdrich's (2012) poem, *Thrifty Gene, Lucky Gene*

When my friends, family, and interviewees have mentioned that diabetes was prevalent in our communities because "it's in our genes," they may not have known about the complex history behind the thrifty gene theory they were casually invoking. The thrifty gene theory was the first to claim that Native Americans are genetically pre-disposed to the disease. The 'thrifty gene' concept was first used and conceptualized by Minnesota-based population geneticist James V. Neel in the early 1960s, to explain why rates of diabetes in Native people was measured for the first time—and at a higher rate than the general US population. Studies done among the Pima peoples in 1955 had hit the news in the United States and internationally, and the rate of type 2 diabetes their community was confronted with was presented in the media as a paradox: how could Indians, thought to be „primitive" peoples get the diseases of civilization? Neel famously hypothesized that Native American people as a racial group (continentally defined in North and South America) get type II diabetes more frequently once "exposed" to civilized society because they lived more recently in a primitive (unsettled) state – marked by cycles of feast and famine. Thus, Native American people, he argued, are genetically pre-determined to store fats in their bodies in a way that was efficient when they lived in this primitive state, but was detrimental once those with the gene lived in "civilized" states of sustained plenty. Thus in the framework of Neel's Thrifty Gene theory, one's degree of Indianness itself became a risk: a sign of disease and deficiency, and incomplete assimilation to an inevitable colonization.

In the 1950's Neel began his search to find what he deemed genetically and culturally authentic Indians to test his hypothesis. His search criteria were based on his

own settler common sense concepts of what an Indian was, drawn from the foundations of racial blood serology and Lewis Henry Morgan's anthropologic taxa, as the following chapter will detail. To be more precise, Neel needed the blood of what he deemed authentic Indians, from which he would extract data, or more precisely, *capta* – pieces of information captured from their sources without consent. His search for what he thought were "authentic" Indians would leave him disappointed in the US as he took blood samples from Pima, Seminole, and Navajo peoples among others, but with plentiful capta once reaching Yanomami villages in Brazil. The 'thrifty gene' concept continues to shape a range of discourses around Native health and well-being today – from scientific studies on "Native American DNA," to doctor/patient interactions, and everyday conversations among Native peoples. I've fashioned this interlude to interrupt the third section of this dissertation, which analyzes the racial politics of blood and measurement in Termination Era, and post-Termination genomics research in the US, with a focus on the conditions of possibility for Neel's hypothesis of the Thrifty Gene. Interrupting the arc towards the next chapter, I'm using this interlude to introduce the idea of the thrifty gene as imagined by a modern Native poet.

Turtle Mountain Band Ojibwe poet, Heid Erdrich's poem, "Thrifty Gene, Lucky Gene: For Asiginak"[86] is the first poem in her 2012 collection of poetry. The name of the book itself, *Cell Traffic*, offers an insight into her thinking of the Thrifty Gene. The idea of cell trafficking refers to a process by which cells are exchanged between a woman and a baby in her womb, which may even include cells from the woman's mother. Cell trafficking dissolves the surface of skin as the supposed boundary of the individual body, and offers a narrative of intergenerational transfer other than the inheritance of DNA. Her book is divided into three sections, and her poem on the thrifty gene introduces the first section, titled "Chimeras:" a term which has various definitions from Greek mythology to biological processes, or simply, "an illusion or fabrication of the mind; an unrealizable dream" (Merriam-Webster 2020). Perhaps an allusion to the fact that the thrifty gene remains a hypothesis that has never been scientifically substantiated (Speakman 2006) despite its recurring incitement, the thrifty gene itself is a chimeric theory that is wished into being over and again in biomedical and population genetics research. The Indian, as my next chapter shows, is allowed within genomic humanity only within the bounds of deficiency, partiality, and inevitable disappearance. Like the DNA molecule's double helix that Neel claimed, "against all odds has made us human" (Neel 1967, 63), Erdrich's poem is wound into couplets which appear as double-stranded lines of poetic reimagining of Indigeneity beyond Neel's genetico-humanism: it's not unlucky to be Ojibwe.

Ojibwe anchors of identity and place are spiraled through the couplets alongside technologies and places common in today's US colonial landscape such as Ziploc bags and Chinese restaurants. Erdrich's remapping emplaces stories of rabbit together with the thrifty gene, reconceived as a gift—"hard to thank them for this gift"—still thread through the everyday. The gift of the thrifty gene, for Erdrich, is one that was passed on actively from "fat and happy" ancestors. Erdrich upends Neel's anti-Indigenous framework in which the 'primitive' body and community were passive receptors of a

[86] The poem is dedicated in its title to Asiginak, spelled the same way as the character in a 2008 book written by Louise Erdrich, the sister of Heid Erdrich, called *A Plague of Doves*. Red-winged blackbird is the English for the Anishinaabemowin word, Asiginaak.

Manichaean (Fanon 1963) understanding of "Western" culture and lifeways. She doesn't mention diabetes itself, in the poem, an ironic reminder that Neel's hypothesis made a leap of logic: obesity and type 2 diabetes are correlated in epidemiologic studies, though the causal connection between the two is more slippery. The thrifty gene as Neel imagined it was one that would cause obesity, not diabetes, though he framed it as an underlying causal factor in higher rates of diabetes among Native American people. In not mentioning type 2 diabetes, Erdrich sidelines this question of causation to reroute a new thrifty gene imaginary.

More central than the thrifty gene itself in the poem is rabbit. Rabbit is woven through the poem, mentioned five times. Rabbit is cited as an impish figure—one who commits "acts of terror and tricky nonsense"—who is there to upend Neel's thrifty gene imaginaries. Like rabbit boxes with the wind—"anxious *waboose"*—Erdrich playfully throws her own punches at this equally non-substantive yet consequential racial genetic theory. Erdrich is not concerned with debates about the actual material existence or effects of the thrifty gene. She makes no nod in either direction to its realist status in the world. Yet she reclaims it anyway, as a gift, forged in the happy bodies of our ancestors into a fine and superior technology of survivance and life that thrives outside of the temporalities of capitalist production: a relaxed winter body burning stored energy is not very "productive." Rabbits do not hibernate, and they have plentiful sources of food throughout the year. In winter, they move less in order to conserve energy, and their diets change to twigs and bark rather than leafy greens, though they never go through times of so-called famine. Invoking this cyclical change of diet, the poem begins in winter, and ends at the opening of spring. Rabbit shifts from biting "thorn and ice" to searching for greens. By interlacing stories of rabbit and the "us" that may refer to the Ojibwe people or to all Native people who the thrifty gene was imagined to define, Erdrich compares the two to create a sense of likeness. As rabbit survives through the winter, so do the Ojibwe, "Plush with winter stores, lusty winter boredom." Thus, Erdrich reverses the idea of the 'famine' Neel conceptualized as a state of mere brutish bodily existence. In Erdrich's poem, the winter is a time of rest from the growing, tending, harvesting, and feasting of the other seasons of the year. The problem is not with the bodies of Indian people, but with the capitalist food production which breaks from the ebbs and surges of annual cycles of food supply.

Yet woven in with this critique of industrial food production and distribution systems is a playful recognition of reality in the colonial present. The Chinese restaurant's placemat, upon which rabbit as a figure of luck also emerges in the poem, marks how Erdrich as a Native poet does not herself live according to the cyclical diet of rabbit. In one couplet, the narrator is placed breifly in a Chinese restaurant, yet at the end of the poem gestures to her cultivation of conventional Ojibwe foods. We find the narrator scolding rabbit for nibbling down her berry vines, writing, "Damn rabbits ate the berry canes / down to nubs again." Indigeneity, in Erdrich's poem, is imagined in ways that do not fit the taxonomies of domination (Arvin 2015) and atavism. Erdrich's reclamation of the thrifty gene as a stroke of luck, rather than a defect or deficiency, not only rejects Neel's methods and hypothesis, but also the broader definitions of health and wellbeing inherent in framing the thrifty gene as a defect. The gene that she writes, "pads us hip, belly, and thigh," is a gift, perhaps, for times when seasonal food consumption may again be a necessity. Indigenous futurity it built not through resistance, as Audra

Simpson notes, but through becoming. Framing the thrifty gene as a "superior technology" even to Ziploc plastic's storage capabilities, Erdrich alludes to such an Indigenous future where it will again bring luck. The thrifty gene, for Erdrich, is for surviving the many apocalypses that US colonialism brings.

3 Body

During the 1950s and into the early 1960s, four development projects were pushed through legislation in upstate New York that displaced and expropriated land from the Haudenosaunee whose reservation lands are within the bounds of New York State. These were: the Saint Lawrence Seaway on Mohawk lands at Akwesasne, the Niagara Power Project on Tuscarora Lands near Niagara Falls, the Kinzua Dam flooding Seneca lands at Allegany, and the New York State Thruway driving through Seneca lands at Cattaraugus. The 1950s post-war period in the US brought a boom of development, including a decisive and deliberate push into Native lands. During the same years in which Termination and Relocation[87] became the focus of the US congress and New York legislators, the promotion of dams, energy projects, and other large infrastructure became a bipartisan issue in congress. Termination and Relocation era, which spanned from the mid-1940s to the mid-1970s, paternalism pervaded the politics of development projects in New York state which aimed to displace Native peoples from their reserve lands, into urban laboring populations, and give them only American citizenship by dissolving their tribal-national citizenships. Alongside the blatant anti-Indigenous racism that developers and boosters of these projects displayed, moves to biologize the relationship between Indian blood quantum and Indigenous sovereign governance permeated these Termination and Relocation era politics. This chapter explores how new measures Indianness in North America as *partial* were dually constructed in science and policy in this era, as Euroamerican settler scientists and bureaucrats fomented biological understandings of race.

At the same time as the Termination and Relocation era, scholars, researchers, and international institutions were involved in a struggle over how to use race as a mode for studying human difference, ultimately giving rise to the first and second United Nations Educational, Scientific and Cultural Organization's (UNESCO) statements on race in 1950 and 1951.[88] This post-UNESCO statement era gave rise to a new range of humanistic biomedical and anthropological research and practice that claimed to reject, or at least distance US researchers from, the ideas of racial purity that came to a stark and horrific head in Nazi Germany and elsewhere. Nonetheless, the persistence of 'race' as a meaningful metric—a metric made material in structural reality as well as scientific research—permeated this era and permeated the Atomic-Age anxieties related to the

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[87] I use the term *Termination and Relocation era* to define a span of time between mid 1940s to the mid 1970s. In this time, the 1953 House Concurrent Resolution 108 and PL 280 which undergirded Termination (the dissolution of tribal landholdings and legal Indian identity) and thethe 1956 Indian Relocation Act (PL 959) was deliberated and then enacted across the United States. See Wilkinson (2005) for a detailed account of this era, and how both Termination and Relocation policies worked together.

[88] Chapters 1 and 2 of Reardon (2005) give a detailed historical contextualization and analysis of these two statements. They have been marked by many scholars as pivotal statements emblematizing a moment in how race was understood in the US and other metropoles, encapsulating a number of humanistic valences between various iterations of race. Importantly, the second statement left the socio-scientific imaginary of three main races—caucasian, mongoloid, and negroid—intact.

questionable futures for whiteness and 'civilization.' New biological constructions of Indianness emerged archetypically in population geneticist James V. Neel's work on the Thrifty Gene hypothesis, as described in Interlude II of this dissertation. This opening for the molecularization (Fullwiley 2007) of Indianness was embraced by population genetics researchers at the University of Buffalo, NY, who aimed to test and confirm Neel and his colleagues' findings among the Seneca and Tuscarora. Molecularizing race is a process by which human difference described as racial is constructed at the level of molecules, reorienting the scientific gaze, institutions, and procedures to matter held and extracted from *inside* the body (Fullwiley 2007; see also Rose 2001). Thus, in the 1950s and 1960s, US politicians and scientists alike were making new kinds of claims about who, and what, Indians were at the corporeal level.

These new claims, I will argue in this chapter, gave rise to a new figuration of Indianness I term the *partial Indian.* I use this term to specify how Native bodies were rendered divisible in new ways in the mid-century era of Termination and Relocation. The partial Indian emerged as Native people were conscripted into new practices of health-making, policy, and biomedicine, all constituted through anti-Indigeneity. The partial Indian figure was ambivalent, and was put to work in political debates about Termination to argue that Native peoples needed to be urged towards full acculturation within the US, and in scientific discourse about the biophysical risks and impossibilities of Indian acculturation which in turn lent scientific authority to claims of Indigenous disappearance in the United States. In this chapter, I flesh out the implications and recursive iterations of this particular anti-Indigenous racial figuration of the Indian, and I show how US colonial knowledge/power constructed the Indian body as a scientific and political object: an object which worked to limit and curtail Native sovereignties. As Simpson writes of the disappearance of the Indian subject in US colonialism, what one may call Indigenous erasure "so profound that mutuality cannot be achieved" (Simpson 2014, 23), I track the false familiarities with Indianness that arise in the place of this colonial unknowing and constructed figures of Indianness in the mid-1900s that constructed and marked racialized bodies in new and particular ways.

Fullwiley (2008, 696) writes about Linus Pauling's 1949 research findings igniting the "molecularization of race." Pauling's work on sickle-cell anemia claimed that Black Americans (who he termed 'hybrids') demonstrated higher rates of sickle cell disease than Black Africans (or who he called 'pure'), even though the latter were more likely to have the sickle cell genetic trait. This claim scientifically refashioned US American anti-miscegenism, suggesting that people with so-called 'mixed' race ancestry could have differing rates and risks of disease than their racially 'pure' counterparts, and raised the interest of medical researchers (Fullwiley 2008) and new biogenetic research into the relationship between race and disease. Other researchers have echoed Fullwiley's findings in other studies. Montoya (2011) writes a border ethnography, showing how 'Mexicanness' as a signature of racial admixture is configured genetically in a university-based, corporation-backed search for genetic contributions to the pathology of type 2 diabetes. As US/Mexico border politics are mediated through scientific practice, the Mexican body becomes racialized in particular ways that naturalize type 2 diabetes in the "Mexican" body. Montoya does mention the persistent return of the Thrifty Gene hypothesis, and notes that it is because of Mexicans' designation as admixed with American Indians that they have been deemed "weak" as far back as the 1830s (see

Montoya 2011, 96). My work takes a more critical lens at how the Thrifty Gene became thinkable, and provides an analysis of the particular anti-Indigenous racism inherent to the concept.

In this chapter I focus on the new forms of anti-Indigenous racism that arose through the molecularization of race in the US, showing the continuities and differences from previous forms of anti-Indigenous racism. I do so by tracing the conditions of possibility for the Thrifty Gene hypothesis to an increased interest in rendering biological long-standing colonial metaphors of racial lineage understood as Indian blood quantum, which I argue is founded in Eurocentric metrics of order and Euroamerican settler anxieties about Indigenous futures. Institutionalizing race at the molecular level biologized an understanding of Indianness as something that may be seen and calculated at the level of biological material. Analyzing the ontological power that genetics-talk held (TallBear, 2013), I argue that while this discourse drew on previous meanings and material practices which constituted blood quantum and Indianness more broadly, the Termination era and the new biomedical racial sciences that arose concomitantly mark a distinct change from how ideas of Indianness were previously deployed in the United States. Previous anti-Indigenous racisms, as the previous two chapters have shown, were marked by a subjectivation of the Indian *qua* Indian as an incomplete person—degraded, deficient, unevolved, weak—while a "civilized," or trained Indian was, in theory more than practice, granted the 'gift' of full personhood in the logic of white possessive selfhood. In new iterations of biomedical Indianness, in which population geneticists and physical anthropologists claimed new kinds of authority over questions of Indian authenticity, those Native peoples they deemed 'civilized,' or at least 'touched' by civilization (Neel 1962), were imagined to be corporeally and molecularly *partial* Indians. The partial Indian, as I term it, is depoliticized racial figuration that, being deemed by population geneticists and US policy makers alike as racially impure or 'mixed,' was imagined to be weaker in the face of disease and death, and unable to govern tribal nations.

To track the moment of this mid-century shift in understandings of Indianness, and the particular anti-Indigenous racisms that emerged, I begin this chapter by providing a brief history of the use of the concept of blood quantum in relation to Native people in the US. I show how there was a distinct shift from the earlier era of race science when blood was conflated with race, culture, and kinship as a metaphor, to the post-World War II era of population genetics, when blood was researched and extracted from Native people as a biogenetic substance that may hold genetic data about the past and future of white "civilization". The third section of this chapter describes how Termination and Relocation era policies were rooted in new emergent form of anti-Indigenous racism. Grounding Termination era debates in the politics of upstate New York Haudenosaunee country, I suggest that new medical and state-sponsored techniques for researching and managing Native life and health also emerged as federal and state-backed efforts to end tribal sovereignty were framed as a form of "emancipation" of the partial Indian. Framing the partial Indian as a figure restricted by their Indianness allowed Euramerican settlers to reason, patronizingly, that the dissolution of tribal governance and land bases was a project borne out with the best interest of Native people in mind.

The fourth section of this chapter focuses on the work of James V. Neel, a founder of the field of population genetics, and his research on Indigenous peoples whom

he termed “primitives” in the 1950s and 1960s. Neel’s research molecularized authenticity through both biologistical[89] and spatial moves. It reformulated the turn of the 20th century salvage anthropology which engendered efforts to record, museumify, and ‘save the culture’ of a vanishing people (Baker 2010; Ben-Zvi 2007). By relocating culture within biological substances of the body—blood—while correlating genetic traits with everyday US American racial group categories—molecularizing Indianness—what scientists so anxiously wanted to salvage was not any kind of lived or discursive culture or nations of peoples, but biological material (Kowal and Radin 2013) of those deemed authentically primitive, or who scientific authorities called "primitives” or “isolates.” Though many have analyzed his work (see Radin 2017), I analyze the volumes spoken by his choice to leave the US on genetic expeditions to Brazil on a search for biologically authentic Indians, after he claimed there were no authentic or pure Indians in the United States. Neel’s work was produced through a new realm of discourse in which racial identity was imagined to be found and confirmed within the biology of the body. Removing place and land and relegating Indianness to a molecularly measurable marker, this discourse medically pathologizes historic and dynamic Native spatial practices (Goeman 2013). Like Termination era policy makers and other public health researchers, Neel linked this lack of authenticity to an increase in disease risk, developing the recursively generative Thrifty Gene hypothesis.

The last section of this chapter describes how research on population genetics, and Neel’s work in particular, was taken up in Haudenosaunee country. By tracking the work of white settler researchers and doctors at the University of Buffalo, I expose the field of blood serology as it was practiced locally on Indigenous people close to particular medical research centers, and how this field bolstered the Termination and Relocation era’s narratives of Indianness not only as ill-fated and atavistic, but also as trait that could be specifically measured and authenticated by scientific practice. I conclude the chapter by suggesting that genomic research on Native Americanness today builds upon these premises of anti-Indigenous discourses and practices.

Blood quantum in science and law

The idea that blood is a carrier of race and culture is a powerful technique of colonial practice and imaginaries, which has been variously enshrined into US law and in settler common sense discourse. The means by which early colonial ideas of race and culture were constructed and lived among early colonial governments and actors, including Native people, have shaped these concepts which are ever-changing, and incomplete (TallBear 2017).[90] In colonial British America, the earliest use of what Circe

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[89] Fullwiley (2008) describes the ways that everyday US American racial categories came to correspond with DNA markers that are imagined to be politically and socially neutral. She writes, This correspondence comprises a biologistical construction of race in which certain raced US ‘populations’ (‘Black’/African, ‘White’/European, and ‘Red’/Native American) and DNA markers with certain statistical frequencies in those populations are each posited as first principles to infer truths about the other.” She cites Jasanoff (2005: pg. 275) to note that this “biologistical construction” may be understood as ‘the natural order’ sustaining and being sustained by the ‘social order.’

[90] Circe Sturm’s book *Blood Politics: Race, culture, and identity in the Cherokee Nation of Oklahoma* (2002) provides a useful history of how English common law had used blood talk to

Sturm (2002) calls "blood language" or "blood talk" in any official capacity occurred in 1705, when Virginia created a legal definition of "mixed blood" which delineated that people with supposedly 1/8 African blood and ½ Indian blood as "mulattos." Later, during the long US/tribal treaty era (1776 - 1871), the concept of "half-blood" or "mixed-blood" was arbitrarily and inconsistently applied in varying cases to distinguish whether a person was an Indian or a citizen of the United States, and thus could be made subject to US laws.[91] At the turn of the 20th century blood quantum became a meaningful legal metric in the US for deciding who was or was not "Indian." This section shows how blood was materialized as racial by working variously through colonial metaphors that entangled policy and science, which were the basis for the later molecularization of Indianness which this chapter describes.

Within both science and law in the late 1800s, similar ideas about Indianness circulated, though often with shifting measures and meaning. The two acts discussed in this section—the Dawes Act of 1887 and the Indian Reorganization Act of 1934—parenthesized a moment when racial science was at its height in the United States. They are also two particular legal moments during which constructions of Indian blood quantum became particularly salient to Indian law: it was both debated, and taken to connote a particular racial factuality. Before the rise of genetic racial science which arose in the post-World War II Termination and Relocation era, blood quantum held traction as a way of determining various rights, claims and responsibilities that Native people had to the US government or their tribal nations. First, during the 1887 Dawes Allotment Act, and second, during the 1934 Indian Reorganization Act. Some scholarly examinations of the history of blood quantum's use in law incorrectly places a sharp delineation, in early 19th century legal definitions of Indianness, into either *social and cultural* definitions or supposedly *biological* ones such as blood quantum (c.f. Spruhan 2006). However, reference to blood quantum during either of these acts did not refer explicitly to a biological substance, but rather to the metaphorical understanding that one's "race" is carried in and inherited lineally through blood from both biological parents. Nevertheless, while in this earlier era scientific definitions and debates were not keenly at play in the legal sphere, concepts of race were expressed and tacitly understood similarly in both arenas. In the earlier era of racial science in which blood quantum became legally salient, scientific productions of the human through racial taxonomic projects such as ethnology and phrenology played a significant role in giving credence to the idea that various Native peoples were part of a race of humans called "Indians," who had particular physiological or psychological traits. Following the colonial logic of racial hyperdescent,[92] in which Indianness was an inherited corporeal trait that would be

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determine proper inheritance of property, and how this English understanding of blood became racialized in the US colonial context.

[91] For example, one case that went through the Supreme Court in 1846, *United States v. Rogers*, determined that a white person who married into a tribe could be prosecuted by the federal government for crimes; thus in this instance, the Supreme Court ruled that "Indian" was legally a *racial* referent, not a marker of political or social membership (see Spruhan 2006).

[92] Decontextualized, hyperdescent is a framework for determining racial designation by which a child is assigned the race of their more socially dominant parent: in this case, Indianness would be subsumed by whiteness, quickly diminishing the number of people who could legally claim to be "Indian." This has been orthogonally related to the concept of hypodescent, commonly

subsumed by the race of a white parent, the naturalizing politics of biology and race in the discursive and legal practices of blood quantum were entangled with a growing field of race science.

Today, the most common story one may hear about early genetics research is the story of the fruit fly, or *drosophila* in its Latin name. This fruit fly was used as a model organism starting in 1910, and today populates most biology textbooks, to help teach basic concepts such as sex-linked inheritance or dominant versus recessive genes. The predominance of drosophila as the model organism, and also as the narrative for the starting point of genetics, belies the centrality of human variance and race of the time. In fact, Thomas Hunt Morgan's use of fruit-flies in 1910, at Columbia University, was an exception from the majority of genetic studies which focused on genetic markers of *human* difference, of which 'race' was a primary category (Marks 2012). The vast majority of geneticists built their work on the theoretical approaches of eugenicists Charles Davenport and Madison Grant, who both served on the US National Research Council in the early 1900s. Davenport's research programs aimed to classify humans on the basis of race and class, arguing that these groups varied in genetic 'worth' and that this variance could explain their differing social and economic status. As a theorist, Grant actively advocated for the sterilization of those with less genetic 'worth.' A renewed popularity of Mendelian genetics—the idea that biological traits were hereditary and thus passed from parent to child—allowed for new articulations of concerns for the superiority of the US as a nation constituted by the Anglo-Saxon "race." Many of these studies looked to measure differences in the frequency of certain traits such as blood group and map them onto prefigured ideas of human racial groups. The end of state-sanctioned black chattel slavery, a rise in immigration, and the continued presence of sovereign Indigenous nations in the US despite the proclaimed "end" of the Indian Wars, compounded racist anxieties about the future of whiteness in the US. Social issues, such as alcoholism, crime, poverty, and prostitution, were framed and biologized as inherent corporeal ills. Naturalizing the cause of social issues as bio-genetical marked bodies as inherently deviant, and opened the door for eugenic solutions: ridding the US population of aberrant genetics, and propagating a population of healthy, white people (Stern 2016)

The 1887 Dawes Allotment Act's assimilative policies encouraged, and in most cases forced, the disbanding of tribes by impelling people to take nuclear family homes and farming and private land ownership. This policy violently coerced Native people to conform to Euroamerican settler ideals of relationships to land and family and home, often on reserve lands that were not farmable and far from their homelands. This was the first time that Congress attempted to establish a universal definition of Indian status, over and against the differing definitions that existed in the many treaties between the US government and various tribes. There was a vast difference in understanding of who was or was not legally an "Indian," from colonial actors and Native people alike. Blood quantum one among a range of measures that the US federal government's Competency Commission deemed salient to determine whether an Indian could assimilate into citizenship. Other measures included, monogamy within a Christian marriage, their English language fluency, the size of Native peoples' homes and their furnishings, and

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referred to as the "one drop rule," where in the US, any amount of Black lineage defined a person as Black, maximized for the economy of slavery.

the presence of Euroamerican farming implements on their lands (Piatote 2013). Specific measures of blood quantum in this era, still a non-biologic and largely arbitrary racial referent based on fallible birth records and the personal judgement of a federal Indian agent, was used by these federal Indian agents[93] to determine who could be given title to land, who could sign away tribal land, and who could then sell that land. All of this was done with tribal disbandment in mind. For example, someone who was determined by the Dawes Commission to be ½ or ¼ Indian blood would be deemed 'Indian enough' to sign away tribal land to the US government, but then not Indian enough to be titled to a private plot of reservation land thus reducing the acreage left for the tribe to govern. The historical record also shows many instances where Native people who would have met the Dawes Commission's blood quantum requirements refused the process of signing enrollment cards, to subsequently be assigned tracts of individual property (Laughlin 2007). Creating these abstractions of Indianness vis-à-vis blood quantum constructed an illusion that the contraction and dispossession of Indian land and lifeways was a logical process.

The second moment which made later understandings of genetic Indianness possible occurred during the Indian Reorganization Act of 1934 (IRA). This Act was put in place to end allotment, to place more Indians into federal tribal bureaucratic positions, and to encourage a host of programming such as technical training, credit, health care, and education on tribal lands. Undergirding this bureaucratization of tribes, the IRA pressed tribal national governments again to make membership rolls that defined who was or was not Indian, this time uniformly across tribes. There was no explicit law that said each tribe had to adopt particular understandings and thresholds of blood quantum in order to make these membership and citizenship rolls—the Bureau of Indian Affairs (BIA) did not have the authority to formulate or enforce such rules. However, some archives suggest that a memo written by the Commissioner of Indian Affairs during IRA which argued that high blood quantum threshold should be upheld for the "good" of the tribe, was circulated among many individual tribes (Laughlin 2007, 116). Many tribal constitutions took on this suggested provision, and in response many people did not make it onto membership rolls for being too low threshold, for being from multi-tribal parentage, or simply for not being present on the reservation at the time of bureaucratization and enrollment.

That blood quantum became legally salient does not imply that the laws and practices around it became uniformly enforced across Indian country, nor was the idea readily accepted by Native people or understood by those in positions of power within the bureaucracy. Even historical reviews of the Certificate of Degree of Indian Blood (CDIB) cannot trace its precise historic origin: the archives are incomplete and inconclusive (Spruhan 2006). TallBear (in Ratteree and Hill 2017) clarifies an important distinction

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[93] Indian agents were administrators who were deemed agents of the US federal government in their districts, and were authorized by the US federal government to mediate between Indians, tribal governments, and the US government. This began at the end of the 1700s and agents were managed by the Department of War, and then shifted in 1849 to the Department of the Interior. In the early 1900s, all existing Indian agent positions were taken over by school superintendents, in the name of assimilation. The section "Molecularizing Indianness and the thrifty gene" below describes how these understandings of hyperdescent were not only anti-Indigenous, but also inherently anti-Black in the context of US colonialism.

about the twentieth century institution of tribal enrollment and blood quantum policies. This shift cannot be understood either as a top-down colonial imposition, as a wholesale adoption of blood politics, nor as an equal-footed conversation between federal agents and Indians. Instead, TallBear usefully frames it as an incomplete, ongoing conversation. Tribes do have varying degrees of legal control over how they define membership, though these politics play out always in the context of a historic and present colonialism. TallBear additionally clarifies that blood quantum is not the only appeal to biology in discussions of belonging and membership. Defining belonging to an Indigenous peoplehood by lineal descent—that membership is based on one's mother or father without any claim about blood quantum or quantification—is also a biological claim to belonging. This is further complicated in conversations of adoption, surrogacy, or egg and sperm donor situations. Tribes are constantly faced with many difficult conversations regarding enrollment; this was particularly true in light of the rights and benefits given to members once some tribes gained more wealth after the 1970s. The political economies of tribes are always a concern in questions of membership, and thus how blood quantum is understood and employed.[94]

Blood, then, has long been employed in efforts to materialize race and belonging in the colonial politics of the US. The rest of this chapter will show how new articulations of race and belonging emerged through the molecularization of Indianness after the UNESCO statement on race, which permeated Termination and Relocation era policies and debates. These new articulations naturalized colonialism by framing disease rates in Native communities as either an effect of an inherent racial defect, or an inevitable effect of the march of Euroamerican so-called civilization. After the horrors of Nazi eugenics, and despite the Nuremberg trials, western scientists worked to bring a liberal humanism and universalizing sentiment to their work as they continued to use race as a key construct by which to measure human difference. As the next section will show, there was a distinct shift from the earlier era of racial science when blood was conflated with race, culture, and kinship as a metaphor, to the post-World War II era of population genetics, when it was researched as a biogenetic substance that may hold data about human difference.

Biologies of Termination

The Termination Era was marked by a series of federal policies that aimed to dissolve all tribal sovereignty and landholdings. Explicit laws of Termination became acts of congress only twenty-one years after what was supposed to be a progressive reversal of the cruelty of the Dawes Act era, the1934 Indian Reorganization Act (IRA). The IRA had forbidden further allotment of Indian land, encouraged reestablishment of tribal organization and activities, and Indian preference for BIA employment, and essentially set the groundwork for "home rule" for tribes. Critics clarify, however, that the IRA was a sour compromise between two options that were on the table at the time: full termination of tribes versus full recognition of Indian tribes and permanent, separate Nations. The IRA supported gradual assimilation but by another name; it granted tribes permission to strengthen their own tribal social institutions in order to prepare them for

[94] This chapter tables this analysis and debate, as its content is not the complex membership rules of Haudenosaunee country, which spans three US states, and three Canadian provinces.

assimilation into state jurisdictions and governments. In the 1940s, the IRA became increasingly challenged in the US senate, from both political parties. Within congress, proposals to repeal the IRA and enact Termination were proposed and contested. This section shows how new biological conscriptions of Indianness shaped both debates and formal policies of Termination, and became written into mid-century landscapes of dispossession in western New York.

Even before official acts of Termination were passed, seven years of policies paved the way for later acts of government. In 1947, there were hearings within the Indian Affairs subcommittee of the House Committee on Public Lands, on various bills that would "emancipate" Native tribes from the control of the BIA. Though couched in the liberatory language of emancipation, these contentious policies, like the 1887 Dawes Act before them, were largely an attempt to end federal responsibilities and relationships with Native American tribes, and with it the land base on and through which Indigenous governance and sovereignties are practiced. Also in 1947, Acting Commissioner of Indian Affairs, Charles Zimmerman, was tasked with finding criteria by which tribes would be chosen for release from BIA services. Among the criteria regarding economic resources of the tribe and the willingness of the state to take over jurisdiction of the land, a primary question was "degree of acculturation." However, how this measure of "degree" worked through various settler common sense understandings of Indianness. All New York State tribes were among those tribal nations that Zimmerman deemed ready for dissolution (Hauptman 2014), or what Termination policy-makers called "emancipation." Senator Hugh Butler of Nebraska, and member of the Senate Public Lands Committee, introduced three bills aimed at New York Indians which would transfer jurisdiction from the federal to the state level and allow for lump-sum payouts of the 1794 Treaty of Canandaigua. While these three bills aimed at New York Indians never became laws, they would later become building blocks for national Termination legislation, House Bill 208, that came six years later.

Termination, as it was boosted, was compared by leading Senator Arthur Watkins of Utah to the Emancipation Proclamation, and Senator Butler wrote that the legislation would 'set the Indians free.' Implying that Native peoples' connections to and lives on the lands they had variously defended and reserved was akin to Black chattel slavery was a mendacious form of propaganda. Turning a critique of the violent history of reservationization towards a call for a wholesale end to tribal sovereignty in the US, these Senators aimed to leverage congressional and public ignorance of Native politics towards their own policy aims through analogies to histories of Black chattel slavery and its legal end. These claims were quickly critiqued for their disingenuity by Native people. In 1948, Ernest Benedict of Akwesasne—who was a journalist, educator, and later a respected elder—wrote critically against this comparison in the Mohawk newspaper, *Kah-weh-ras!:*

> *Masquerading under the high-sounding cover of "setting the Indians Free" are a series of Bills which strike at the very roots of Indian economy, and if passed would reduce whole Indian populations to poverty and dependence. These bills, which might, to an unsuspecting friend of the Indians, sound like pro-Indian legislation because of the holy guise of "emancipation" wrapped about them, are actually being pushed by the*

> *big business interests who want to get hold of Indian property.* (Benedict, 17 April 1948).

Benedict's critique foreshadowed the ways in which, though New York Indians were eventually made exempt from Termination policies, business interests in Haudenosaunee lands encroached upon their sovereignties in the years following the legislation.

Throughout the congressional hearings about Termination, congressmen's a priori understandings of rightful property and human subjectivity only belonging to white people shaped their ineptitude to listen to and take into account what they were being told about Native identity, history, and sovereignty. The next three paragraphs will analyze the congressional hearings on Termination that pertained to the "Indians of New York State" for this agnosia. Despite Watkins' boosterish public proclamations of so-called Indian emancipation, he personally attacked Native and non-Native delegates who questioned termination policies during congressional debates. In February and March of 1948, the Senate Committee on Interior and Insular Affairs' Subcommittee on Indian Affairs held a series of hearings about bills regarding common Termination issues—namely jurisdiction and final treaty settlements—in Washington DC. On the 9th of March the subcommittee began a three-day session focusing on New York Indians, led by Senator Watkins. Watkins began this session presenting the forthcoming argument: just as Italian or German immigrants do not maintain rights given by their home countries when taken as citizens of the United States, Indians should not either. T.H. Haas, chief council from the BIA, reminded him that Native people were there tens of thousands of years before the US existed, and that the US entered into treaties with tribes as foreign nations, and to abrogate those treaties would be considered immoral. Watkins did not respond to this comment and continued on with his questioning, actively and stubbornly rejecting any terms of property, personhood, or political status that did not affirm whiteness.

After dismissing Haas, Watkins insinuates that there may be a correlation between a person's blood quantum and their opinions on Termination. Watkins immediately pushed the question of blood quantum as a means to authenticate who is and who is not an Indian, stating, "[o]ne question as to who are Indians and who are not Indians. You say you leave it to the Indians to say they are Indians, and they can go out and take every drop of blood in anyone and say they are Indians." Watkins went on to joke that he was "almost persuaded to become an Indian", to the laughter of some in the room (United States 1948, 19). Yet later that same day, Watkins remarked, "I ask these questions, not to reflect in any way on *you people,* but because we are having difficulty in Congress to determine who are Indians. We have some people who may have only a thirty-second degree of Indian blood, but they claim to be Indians. I can't understand why they want to be Indian rather than white…We would like to know just how much Indian blood the witnesses have, or claim to have, so we can get an idea of the feeling of the people in the various categories." (United States 1948, 84, emphasis mine). Watkins both directly insults the Native delegates in the audience, and gives voice to an imaginary that one's amount of inherited "Indian blood" may map onto one's opinion about Termination policies. As he interviewed a series of Haudenosaunee people who came as tribal delegates or individually to DC to testify, he asked them first and immediately their blood quantum. Many refuted or skirted a direct answer, instead proclaiming their tribal

affiliations, and some including their matrilineal clan, and a few gently correcting his question to let him know that Haudenosaunee people do not determine tribal and community inclusion simply by blood quantum. Questioning the delegates' degree of "Indian Blood," Wilkins ultimately rebuffed their pronouncements of matrilineal descent, and argued that they were not speaking as "real Indians," but as assimilated Indians asking for separate status in the eyes of the law. When four Seneca delegates from Cattaraugus and Allegany attended Watkins earlier 1948 hearings on the prospect of Termination, they attested to their concerns about anti-Indian racism among local state courts in southwest New York State; claims that Watkins quickly dismissed (Hauptman 2014).

Alice Lee Jemison, a Seneca woman—who was both an activist and journalist and who also fought also against the IRA and the BIA—from Cattaraugus had moved to Washington DC in order to keep track of how Indians were being discussed and treated in these hearings. She questioned, during the hearings, what would happen when NYS civil laws were applied to Seneca, when, "our property laws of descent and inheritance are in direct conflict with the laws of State" (United States 1948, 26). In response, Senator Butler applauded Mrs. Jemison's comments and argument and remarked that she could be proud of her lineage. To this paternalizing comment that reduced Mrs. Jemison's analysis of Haudenosaunee politics to a mere 'noble heritage', Mrs. Jemison retorted, "Senator, all white people tell us that, but when it comes to helping us, listening to what we have to say, then they say 'Well, we will do what we please about it. We know better than you do.'" (United States 1948: 26). Throughout the hearing, Watkins and others involved continued to willfully set the terms of the debate in ways that deny knowledge or agency of the Native people whose histories and lives they are describing. Throughout these hearings the senators involved dissociate from history in ways that actively refuse to conceive the importance, meaning, or breadth and depth of Native sovereignty: and its colonial entanglements with blood quantum's racializing and dispossessive machinations.

On August 1st of 1953, House Concurrent Resolution 108 passed declaring Termination the official congressional policy of the United States, prior to further acts of congress. This resolution included the Indian tribes and individual members of any tribe located in New York, among other states, and suggested making them "subject to the same laws and entitled to the same privileges and responsibilities as are applicable to other citizens of the United States" (quoted in Cattelino 2010). As a result of Termination, 109 different tribes and bands were dissolved, with at least 1.37 million acres stolen, and approximately 13,250 people directly affected (4% of Native people counted in the 1950 census). Already in 1951, the Voluntary Relocation Program had established a pipeline to urge young reservation-based Native Americans to move into urban centers across the United States. This occurred while the BIA was under the direction of Dillon S. Myer, former director of the World War II Japanese-American internment program's War Relocation Authority; young Native people were met with discrimination and poverty in many urban centers (Ramirez 2007). As BIA leadership centralized in the early 1950s, tribal consent for BIA-imposed programs was taken as superfluous and unnecessary. After Termination policy went through, Indian land was appraised and sold to the highest bidder. For better or worse, there were no more protections or oversight against sale of land, or expertise in resource management available to tribes. Indian Relocation was a policy, then later an Act (PL 959, 1956) that

pushed Native families into slum-like urban housing, Native men into underpaid urban jobs, and Native women into positions as maids and domestic servants to white urban families; all with little to no training and support, and in the name of depopulating tribal-national lands. State legislators gained authority over social life, including land use, health, adoptions and child welfare, and education. With Termination's Public Law 280, all non-federal court cases involving tribal members went from federal down to state court systems, which was anathema for tribes who knew well that local and state officials were the closest enemies of Native peoples. The authority to tax people on lands now no longer part of Indian Country represented a threat to local Indian-owned businesses, individuals, and a representational affront to the sovereignty of Native peoples. Any federally run programs that, successfully or not, supported tribal governance including training, housing, and business grants, ceased. Programs meant to serve tribal populations and individuals also abruptly concluded, including the Indian Health Service clinics, and education and welfare programs.[95] Any authority to govern over people or land was lost to now-dissolved tribal governance bodies.

Termination policies also cut Native people off from federal health monies and access to health care. The health of Native people, particularly those directly targeted by Termination policies, declined precipitously (Pfefferbaum et al. 1995). A few researchers took notice, and suggested Indian Health Services move from federal administration through the BIA to state administration through the Department of Health and Human Services and the US Public Health Service. The goal was towards greater access to health services to Native people now deemed part of the US 'public.' In 1953, the *First National Conference on American Indian Health* was convened to discuss the possibility that this transfer may occur (Fahey and Muscenheim 1965). The transfer was made the following year. By the time the *Third National Conference on American Indian Health* was held in 1956, new Indian health officials and agents met to discuss what were deemed the most pressing health issues in Native communities, focusing on mental health and infectious disease. It was discussed in these conference proceedings, a copy of which I read while searching through population geneticist James V. Neel's archives, that "the Indian" was in a transitional phase, pulled by both industrialization on one side, and by tradition and tribal society on the other. These extreme pulls made Indian people's so-called *transition* difficult, conference-goers claimed, and this phase was the likely cause of excessive mental illness in Native people. Lingering Indianness, this suggests, is the root cause of such illnesses, and made assimilation, assumed inevitable, more difficult for many, and impossible for those who may not survive it. High rates of mental illness, trachoma (Fahy and Muschenheim 1965), death by accidents (Schmitt et al. 1966), as well as diabetes (Neel 1958), were all understood through this perceived incongruence.

The 1950s post-war period in the US also brought a boom of development which included a decisive push into Native land. During the same years in which Termination

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[95] In 1832 the first congressional budget specifically for Indian health care passed in 1819, designating $12,000 for physicians' visits and vaccinations, though physicians sent to work with Indians were not required to hold any medical degree. Treaties were passed during this time in which health services were promised as 'payment' for Indian land, setting a precedent for the fact that today, Native Americans are the only group, besides imprisoned people, who are guaranteed free health care by the United States government.

became the focus of the US congress and New York legislators, promotion of dams, energy projects, and other large infrastructure became a bipartisan issue in congress. Undergirded by Termination-era paternalism, such development took the guise of pulling Native peoples off their reserve lands, and coercing them into US society and white settler citizenship. During the 1950s, four key development projects were pushed through, which displaced and expropriated land from the Haudenosaunee: the Saint Lawrence Seaway on Mohawk lands at Akwesasne, the Niagara Power Project on Tuscarora Lands near Niagara Falls, the Kinzua Dam flooding Seneca lands at Allegany, and the New York State Thruway driving through Seneca lands at Cattaraugus. The first was in the early 1950s, Canadian and US development corporations and hydro-electric and power authorities joined together to undertake a project that would widen and direct the St. Lawrence River, to turn it into a shipping passage and build hydro-electric power plants. Construction began in 1954, and was put into use in 1959. The Saint Lawrence Seaway project expropriated 1,260 acres from the Mohawk people of Akwesasne, which sits straddling the St. Lawrence River, on either side of the colonial US/Canadian border. Little compensation was received, and the few jobs that were provided to the people of Akwesasne dried up quickly when the project ended.[96]

Soon later, in June of 1956, two hydroelectric stations collapsed into the Niagara River, and 400,000 kilowatts of power were lost to the extensive grid fed by Niagara Falls hydroelectric power stations. Robert Moses—New York City developer, New York State Council of Parks chairman, and then New York State Power Authority chairman—proposed a new power project just a year later, which first proposed to take 960 acres of Tuscarora land. After a year of legal battles, Moses' request increased to 1,383 acres, which would have been about 20 per cent of the Tuscarora Nation reservation's total lands. Clinton Rickard, who was Tuscarora chief at the time, writes in his autobiography about the "race prejudice and contempt for Indians" espoused by Robert Moses and those with whom he worked (Rickard and Graymont 1975, 147). Tuscarora argued ardently against this project, citing the 1794 Pickering Treaty and the 1790 Trade and Intercourse Act which prohibited state authorities and legislatures presiding over land transactions with Indians. Moses took his case to the US Supreme Court, and the Tuscarora lost with a minority vote of three justices. Moses' overt racism towards the Tuscarora was punctuated by arguments that stripped the meaning of Tuscarora land and life into the framework of US settler sovereign landscapes, as I outlined in the first chapter of this dissertation.

Unable, or refusing to recognize Tuscarora territory as a vibrant Indigenous place, the New York State Power Authority's (SPA) justifications for their desire to flood Tuscarora lands fashioned again the colonial agnosia of settler landscapes. During a November 1958 hearing about the project held in Washington, DC in front of the Federal Power Commission, Rickard recalls how the SPA drew in so-called experts to testify on the value of the Tuscarora land they proposed to take, naming it "worthless" land. During the hearing, the SPA exploited pictures of home-made outhouses outside of homes on the Tuscarora reserve that the SPA had taken aerially, denigrating the way of life of the people there by insinuating that the presence of outhouses was a sign of a lack of

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[96] Elizabeth Hoover's (2017) book, *The River Is In Us: Fighting Toxics in a Mohawk Community,* details the ways the project changed social and cultural life for the people of Akwesasne.

civilization and investment, rather than a sign of Native people's choices to live certain ways or of their ingenuity in the face of so-called poverty.[97] In a seven-page pamphlet published by Robert Moses in 1960, after the power project was approved in the Supreme Court, Moses repeated these claims: "the bulk of the land is not used for any purpose at all…there is only one real farm run by an Indian" (in Rickard and Graymont 1974, 147), echoing centuries-old claims about the nature and the supposed lack of value of Indian land. Moses also made the claim that the small population of Tuscarora on the reserve was reason enough to let the land be taken: a small population of "poor" Indians, for Moses, was not of concern when larger considerations of development of the US Nation-State was in question. The SPA suggested that Tuscarora buy land on the other side of the river, to allow the project to move forward, but refused to guarantee that land would be held in treaty with the US government. Ironically, the nearby settler town of Lewiston argued against the power project's construction within their boundaries on the grounds that their land was taxable. Putting the project in Lewiston, they argued, would cause the town and the state to lose taxes; if it were built on Tuscarora land deemed non-taxable, this would not be the case. Essentially, the offer on the part of the New York SPA was to move the entire community and to end Tuscarora sovereignty over their land that the Seneca had deeded to them over a century-and-a-half earlier: termination by other means. A huge effort of activism on the part of Tuscarora reduced the total expropriated acreage to 550.

Meanwhile, throughout the early 1950s, actors in the US federal government and in the New York State legislature worked to capitalize the Seneca's treaty annuity, which would have meant essentially buying out the treaty obligations by reducing annual payments that represented ongoing recognition of Seneca sovereignty to a one-time buy-out. Following the Seneca's 1942 jurisdictional win with the federal Court of Appeals case *United States v. Forness* which confirmed the right of the Seneca to cancel the 99-year leases they held with Euroamerican settler tenants who were delinquent with their payments, lawmakers in Albany created a Joint Legislative Committee on Indian Affairs. This state committee was a key actor working to overturn Seneca sovereignty. The majority of Seneca opposed the capitalization of their annuity and concomitant Termination; following the deaths of Nebraska senator Hugh Butler and New York congressman Daniel Reed, the push to terminate Haudenosaunee tribes in New York state subsided.[98] While the congressional push for formal Termination was not successful among the Seneca, development project coordinators in the state threatened Termination as a warning to the Seneca, among other tribes, if they would not allow portions of their lands to be expropriated for development projects.

In 1954, part of the immense New York State Thruway project took a new southern turn from Buffalo, NY to Erie, PA, and pushed through Seneca lands at Cattaraugus. Soon after, between 1956 and 1966, the US Army Corps of Engineers spearheaded a project, ordered by the federal government, that aimed to build a dam that would control flooding of the Allegheny Valley and Pittsburgh, PA. Pittsburgh,

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[97] I am grateful to the analyses of Dr. Jolene Rickard for clarifying the way in which the label "impoverished" denies Indigenous, and specifically Tuscarora ingenuity, agency, and choices to live in particular ways.

[98] See Hauptman 2002 for a more detailed historical account of this era.

Pennsylvania, sits 150 miles south of the western New York State border, and the business district sits at the convergence of three large rivers, including the Allegheny. After Pittsburgh experienced an economic revival after World War II, city leaders began to push the federal government for flood protection, which had been put on hold during the war. In 1956, after a particularly costly flood of the Alleghany Valley in Pennsylvania, the Army Corps of Engineers moved forward with a survey of the Kinzua site, funds were appropriated for the dam in congress, and Congressional hearings were held without the knowledge or invitation of the Seneca. The Kinzua Dam, built between 1960 and 1966, when it was put into operation and flooded more than 9,000 acres of Seneca Nation land at Allegany in Western New York. Over 700 Seneca were part of a contentious and grievous relocation project, that is commemorated yearly today at the site where a 35-mile lake covers their former homes.

Thus, while there were no formal Termination proceedings carried out on any of the Haudenosaunee reservation communities in upstate New York, the coercive politics of development projects became an invasion of both Haudenosaunee territory, and a reconstitution of colonial conceptualizations of corporeal Indianness. Ideas of blood quantum and Indianness took new bio-political valences in Indian County more broadly, and in upstate New York in particular.

Molecularizing Indianness and the thrifty gene

In the 1960s, after Native American health became the focus of the US Public Health Service for the first time, and taken out of the hands of the BIA alone, genetics researchers funded partly by the USPHS took up the issue. It was at this time that James V. Neel would come up with his *thrifty gene* hypothesis for why diabetes was just then measured among Native American people for the first time and at much higher rates than the rest of the US population. This section details how in this era, the emerging field of population genetics of which Neel was a founder was a key arena in which Indianness was biologized and biomedicalized. Key to making Neel's work salient was the national and global context biomedical research. A new politics of care emerged vis-à-vis racializing populations. As historian Keith Wailoo (2011) shows, when there are changes in disease trends, particularly when those changes are measured across the constructed boundaries of race, gender, or class, there is often anxiety around discovering where this change comes from. These anxieties never manifest in ways politically neutral. This section details how population geneticists merged biomedical research with that of human history by drawing on earlier anthropological and ethnological methods, categories, and analyses, instantiating a new regime of apprehension in which biologized decrees of Indian authenticity became couched in a discourse of humanist science.

Termed a *disease of civilization*—or illnesses that only "civilized" people developed—in mid-century discourses of public health and medicine, diabetes' newly-measured prevalence in Indian bodies was taken by biomedical and public health professionals as a clear sign that Indians were no longer "primitive" peoples. In the first half of the 1900s, physicians and medical scientists in the United States repeatedly published affirmations that "Indians," understood as a race, did not or even could not get diabetes (Tuchman 2011; Gohdes 1995). In the 1950s, discourse around diabetes shifted. After a 10-year near radio-silence in US health policy, studies, or records on issues of Native American health, new research began to emerge with bureaucratic and structural

changes. Funding and initiatives for research on Native American health issues became part of the purview of the US Public Health Service, while research on "primitive" people became a focus of new international health and science research bodies (Reardon 2005). Data taken from the Pima and the Tohono O'odham (then mis-named the Papago peoples) showed that diabetes was rising at rates alarming to US Public Health officials. While type two diabetes rates were rising in the general American population, they were rising much faster in the Native population. This complicated many standing assumptions about the disease itself. How could Indians, so recently living as a supposedly "primitive" people, get a disease associated with opulence and civilization? How could diabetes occur in poor communities, living in rural areas?

To account for this newly measured prevalence, many medical and public health researchers at this time had to actively shift the paradigm of their assessments, not only of type 2 diabetes but also of "Indians." Adopting tropes of Indianness from a previous era and adapting them within the discourses and practices of new public health institutions and biomedical technologies, the increase came to be understood in health institutions as an incongruence between an Indian biologic nature and the civilized culture in which they were exposed to. Allegedly "inherent" genetic or psychological differences of Indian bodies, deemed biologically primitive, were thought to make them unable to thrive in modern, civilized society. This etiological framework was not limited to diabetes, and these perceptions underwrote and were co-produced with the Termination era's policies of acculturation and dispossession via dissolution of tribal sovereignty, identified above. The anti-Indigenous racial image of the diabetic Indian conveyed that a body unable to govern itself was deemed unable to govern a sovereign tribal nation. The locus of Native sovereignty, constantly being diminished in white settler terms, was in this case the body itself.

The rising prevalence of chronic diseases also put into question the future of epidemiological practice and public health administration which had, until this point, focused on sanitation and containing communicable diseases. The emergent fields of population dynamics and genetics, researchers argued, would integrate with biomedicine by discovering the link between environment, genes, and illness that would render chronic diseases treatable and preventable. After the horrors of Nazi-era experimentation and eugenics, establishment scientists across the Western collaborated in efforts to build a new meaning for humanist science that would distance themselves from Nazi racism. Publishing the 1950 draft, and the 1951 revision of the UNESCO Statement on Race, these scientists reformulated the sentimental side of science as a *public* good for all of humanity. Importantly, the second draft of the Statement maintained a distinction between ontologically "real" race as an object for continued biological research, and "racism" as a mere ideology. It was written just two years after Linus Pauling's foundation work on sickle cell anemia which was considered an "intellectual opening for the molecularization of race" (Fullwiley 2008, 696). Fields such as physical anthropology, formerly focusing on taxonomic divisions of race and other human difference, attempted to reimagine themselves, and population genetics was a key site of this. Race as a concept was still at the forefront of this new research, though it was taken up in a variety of ways by different researchers and schools of thought (see Marks 2012). Made possible by new genetic technologies, the molecularization of race *and* disease were seen as ripe and vital areas of research. Race and illness, it was thought, were to be

found in genes themselves. Individuals were thus seen to be parts of gene pool populations, instead of embodying a pure 'race.'

New international scientific networks emerged after World War II, institutionalizing highly-funded efforts towards "pure research" (Haraway 1989), or research that is imagined to generate ivory-tower universalisms and truths about the world. The International Biological Program (IBP), which ran from 1964-1974, was formed to initiate the world-wide study of biological production on land and in seas, in order to find new or new uses of existing natural resources, and to study "human adaptability to changing conditions" (Radin 2013). US American involvement in the IBP was facilitated by the National Academy of Science and the National Research Council, and funded much of Neel's work along with the USPHS. In the mid-1950s, Neel transitioned towards working on "primitive" populations, and away from working with the Atomic Bomb Casualty Commission (ABCC) on the 'hibakusha,' or those people who survived atomic bomb blasts in Japan but were exposed to radiation. Like the hibakusha, this generation of population geneticists and biomedical researchers primarily from the US and Europe, framed 'primitive tribes' as "a scarce and precious intellectual resource" (Lindee 1994, 4), resourcing the biological content of Indigenous people's bodies as the source of their own intellectual property. A young World Health Organization (WHO), which had recently formed in 1948, framed health research on primitive people' as a matter of urgent concern. Mimicking the nearly two-century-old "vanishing Indian" trope, this urgency was claimed precisely due to Indians' supposed imminent and inevitable disappearance, by either death or 'acculturation.' Though tinged with nostalgia for a supposedly dying 'race,' the scientific ambition was to extract valuable data on civilizations past held in Native people's bodies.

The use of the term 'primitive' was not done without reflection. In a draft of a later paper, Neel and his collaborator Chagnon wrote, "[w]e use the term 'so-called' [primitive man] because the appellation primitive as employed by the Western world is largely synonymous with non-literate, non-material and non-technological, but completely overlooks the linguistic complexity and the richness of the kinship and ceremonial systems of these groups, a richness which our own culture has largely lost" (Neel and Chagnon 1968, 681). A sense of an uncertain future for what they term Western (white) civilization circulated through these mid-century research and health organizations. Not only shaped by the insecurities of the Atomic Age (Radin 2017), research agendas on primitivity emerged from a produced sense of *lack*. Supposedly lacking a "lost" *culture*, the white 'we' of these organizations performs a desire not just to study Indigenous peoples, but to define them, and to know them. The effect of this knowing, as this section shows, is to disappear Native people on their own terms, and ultimately, to become them: if "primitive" people are merely the genetic predecessors to white civilization, then as they supposedly disappear, Euroamerican settler scientists fashion themselves not only as the inheritors of their lands, but of their genetic being.

One founder of population genetics, Theodosius Dobzhansky, first proposed the urgency of studying what he called population "isolates" at a Cold Spring Harbor symposium in 1950, likening the so-called "isolation" of groups of humans in geographically remote regions or islands to the island finches that Darwin had studied a

century earlier.[99] New techniques in blood serology – enlisting the practices of hematology, as well as new freezer and transport technologies (Radin 2017) – was presented as an empirical supersession to earlier physical anthropologists' reliance on physiological features for so-called 'racial diagnosis' (Reardon 2005; Marks 2012). In other words, extracting data from blood of individuals and calculating it into rates and ratios was configured as more objective and thus less prone to racist interpretations, as it was removed from the immense variance within human physiology. While this began as an extension of a solely taxonomical project, by the 1960s this "new physical anthropology" had retooled its focus to evolutionary processes and human adaptability including biomedical concerns, studies continued to variously take up concepts of race adapted from earlier research and practices (Fullwiley 2008; Montoya 2011; Marks 2012).

In the 1950s, US Government funding was earmarked for research and programs into the care and etiologies of chronic diseases, new health policies were written, national and international health research institutions and networks formed, and graduate programs on the study of population health were instituted in universities across the country (Susser 1985). This new rise in chronic diseases became a locus for research on the relationship between changes in genetic factors and in environmental factors, and their respective effects on disease rates. For example, in a 1958 article, Neel engaged in a debate about whether, and to what degree, people living in industrially developed societies or countries were still acted upon by biological forces of natural selection. Neel argued that environmental conditions—a nebulous concept associated loosely with culture and agricultural modes of production described as 'dietary changes'—had an effect on the "expression and evolution of a given genotype" (Neel 1958, 794). He posited that an increase in the consumption of animal fat, and a decrease in physical activity among who he calls "American and European families," could result in those people who were genetically pre-disposed to heart disease and diabetes having those susceptibilities triggered, therefore making them "subject to natural selection" (Neel 1958, 795), namely death, before reproductive age was reached. It was in this article that Neel first proposed that because primitive people were "being projected in a few generations from a Stone Age to an Atomic Age culture," that this made the relation between this rapid cultural change, their genes, and their health an "exciting opportunity" for research (Neel 1958, 797).[100] Genetic data based on blood serology was put to use in particular ways, in other words, to address and often super-impose the long-standing questions and categories of physical anthropology.

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[99] Chapter 3 of Reardon's (2005) book *Race to the Finish: Identity And Governance in an Age of Genomics*, analyzes in great detail how these early population geneticists, though taking up the mantle of anti-racism, took up the mantle of Darwin's analyses but in an effort to distinguish human racial difference. She argues that this era in population genetics set the stage for the genomic analysis of the Human Diversity Project of the early 1990s.

[100] Neel also presented a proposal for research on sickle cell in Africa in this 1958 article, though it would not become part of his research; instead he focused on developing what would become his thrifty gene hypothesis. Joanna Radin notes in her book, *Life on Ice*, that Neel had written to Salzano that he already had plenty of frozen "negro" blood on hand at his lab from during his few years doing sickle-cell research, and that having some "Indian" blood in his lab would serve his research well (Radin 2017, 103).

Neel postulated that people of the Pleistocene era (which is a period of time that spans from 1.5 million to 10 thousand years ago) developed the ability to store fat efficiently which allowed them to survive what Neel imagined to be waves of feast and famine (Neel 1962b): another binary that Neel reconstructed within his work. Neel posited that American Indians had lived in this primitive state of feast and famine longer than other populations around the world. He argued that as 'primitive' people came into 'contact' with civilization, where he assumed there is a stable supply of food for all people, the thrifty gene would become a defect. His reasoning was that if one stores fat all year round with no seasonal times of famine, then one would gain weight and possibly develop type 2 diabetes. While the search for the thrifty gene under Neel and his teams' rubric took place through lab work on blood of the Yanomami people from Brazil, the hypothesis itself is based on the 'observation' of increased disease rates and deaths among Native people within the US. This "necropolitical teleology"[101] (Goldstein 2014) is only made possible through first, a continentally-based anti-Indigeneity based on pure racial groups present in 1492 and Columbus' accidental arrival, and second, a perception that North American Indigenous are no longer pure, whole, or authentically Indian. The blood samples from Indigenous people that Neel accumulated from other researchers, and the trips that Neel himself made to research on Navajo, Seminole, and Pima lands and peoples – and even the blood samples he took there – were not deemed biologically pure or "primitive" enough for his research, having been "touched" by civilization.

In late 1962, the WHO held a convention in Geneva titled *Population Genetics of Primitive Peoples*. James V. Neel had recently returned from conducting pilot studies among the Xavante in Brazil. Neel's team of five, including himself, was an international collaboration. Pedro Junquira, a hematologist and a population geneticist, and Francisco Salzano, his former student at the University of Michigan, both came from Brazil's urban centers. David Maybury-Lewis was a cultural anthropologist from Harvard who went to document the project. Friedrich Keiter was an Austrian racial biologist, who was an active member of the Austrian Nazi Party in the 1930s, a member of the Nazi Party of Germany in 1940, and was drafted into the Nazi armed forces as a medical doctor a year later. After the end of World War II, Keiter was unable to continue teaching in Germany or Austria due to his Nazi Party affiliations, though he was able to work in the private sector, and was part of a private forensic anthropology lab based in Hamburg, Germany. Through this lab, Keiter contracted as a private lecturer and consultant for projects such as Neel's despite Neel's discipline's claim to distinction from Nazi Germany's physical anthropology.[102] This first trip resulted in numerous publications, and a growing collection of morphological data and a store of frozen blood samples of the Xavante and Yanomami people in US laboratories.

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[101] Goldstein (2014) describes how anthropologists and historians rendered Native death, in the wake of civilization, peaceful and natural and figured Indians as naive victims of their own barbaric hospitality and arrested development. This became a discursive claim to rightful belonging of settler people and polities in US nation-state space that made space for a pretense of liberal democracy.

[102] Keiter's work, particularly his anti-Black publications, are still circulating today on various German-language neo-Nazi websites.

While appeals to biological metaphors of 'blood quantum' held particular weight in previous times as shown above, the discursive power of genetic data as "scientific fact" gave undue authority to the "Truth" of such claims to Native American or Indianness (TallBear 2014; Radin 2017; see also Conrad 1999). Theories about human difference are written into Neel's research practice in which assumptions about cultural difference and Indian 'authenticity' were biologized in new ways. In private notes of Neel's of 1965, he roughly sketches out the tribes of the United States that may have 95% or more levels of blood "purity." That same year, for example, Neel's 1965 visits to the Pima and Tohono O'odham communities yielded no research prospects (Neel 1965a), only further confirmation of his current research design. During a PAHO meeting in June 1968, a proceedings note-taker recorded commented on Neels' presentation: "the high prevalence of gall-bladder diseases and diabetes mellitus among the Pima Indians are also in line with an interpretation of stressing the role of cultural changes in the pathogenesis of these diseases" ("Report of Special Session…" 1968). Neel's notetaker was prescient: in the long run the Thrifty Gene hypothesis was never borne out in research, and the changes in Pima peoples lifestyles precipitated by colonial violences plainly account for the increased prevalence of type 2 diabetes (Fee 2006).

Neel's *partial Indian* constructed multiple binaries, a key one being that of culture and nature. On the one hand, racial blood serology was presented by Neel as a feature of nature. However, in Neel's work, categories of race and place derived from anthropological understandings of 'culture' informed his studies at every step. The cultural 'level' of a people was, for Neel, indicated by their language group, the size of their communities, and their mode of agricultural production. Neel's 1964 research prospectus, written with for their work in South America quotes anthropologist Lewis Henry Morgan's *Ancient Society* (Morgan 1877) at length, naming him as one of the "intellectual predecessors" (Neel and Salzano 1964) of their work. First they note Morgan's call to study the progressive advancement of savage, to barbarian, to civilization. Morgan's typologies and racio-temporal framework reverberate throughout Neel and his team's work: "the history and experience of American Indian tribes represent, more or less nearly, the history and experience of our own remote ancestry when in corresponding conditions. Forming a part of the human record, their institutions, arts, inventions, and practical experience possess a high and special value reaching far beyond the Indian race itself" (Morgan 1877, quoted in Neel and Salzano 1964). The mode of agricultural production that Neel sought out was usually either hunter-gatherer or "simple digging-stick" agriculture (Neel 1962). For Neel and other population geneticists of the time, these practices were a sign that a people had been geographically isolated enough from European influence that since 1492 their genetic make-up had not been mixed with other continentally-based 'racial groups.'[103] Taking on Morgan's call to research primitive life as a Termination and Relocation era researcher, however, drew Neel outside of the United States.

Neel and Salzano's 1964 research prospectus for research done in South America, based on their first research trip to Brazil mentioned above, was presented to the Wenner Gren foundation. Neel and Salzano's (1964) first research question was that of taxonomy,

[103] Neel was also deeply involved in debates about the Bering Strait theory of human arrival to the North American continent, consistently working to confirm the theory.

and how to recognize genetic divergence from a supposed "founding stock," as a way to measure the "tempo of human evolution." Second, they claimed that though many Native groups have been "touched by the discovery of America," there are plenty that are still hunter gatherers and therefore could provide a way to study the nature of natural selection during human evolution. Their third question regards the analysis in the preceding section: they wish to study the diseases that American Indians became susceptible to and what genetic changes occurred as they, in their words, made "the transition from a near-Stone Age to an Atomic Age existence" (Neel and Salzano 1964, 85). They referred to studies, some their own, which had taken blood from Xavante and Waica peoples in today's Venezuela, Carajás and Kariri peoples in Brazil, the Yupa and the Irapa in British Guiana, and Indigenous people in Surinam, to find which blood groups phenotypes showed significant differences in frequency. They cite a call to multivariate analysis of blood group data, but did not themselves perform such statistical tests. They name their task as to "distinguish genetic groups comparable to, or different from, the somewhat debatable physical types of the anthropologist" (90). In other words, Neel and Salzano here suggest that peoples grouped by race in accordance to physical characteristics as anthropology had done for a century, should be researched for the similarity or difference in relation to their blood group. They prominently discuss the Diego antigen, or "Diego-a" blood group, as it became a topic of excitement and discourse in the new field of population genetics in the decade that followed including in Haudenosaunee country, which I discuss in the next section.

Neel developed his earlier hypothesis to explain the prevalence of diabetes among 'primitive tribal' people, based on this research. This fieldwork would also be the basis of his influential work on the thrifty gene, and he would continue this research for decades. During my research in Neel's archives, which he self-curated and donated to the American Philosophical Society in Philadelphia, PA, I found notes and outlines he had written over the years. The image below is a portion of an early outline of a 1982 paper he and a team wrote on earlier glucose tests done among Indigenous peoples in Brazil, and Indigenous peoples who live in Central and Southern Africa. In his own shorthand, he notes for himself that his discussion should involve the glucose tests of various bodies that he deems representative of a "wild Indian" or a "tame Indian." These shorthand terms, wild and tame, are meant to stand in for what in the final published version appears under the terms "more acculturated" or "less acculturated" (see Spielman et al. 1982). Filtering his research into a publishable article, Neel translates these rough and racist categories into a humanistic terminology, though his meaning does not change. His notes, and use of the terms wild and tame, thus divulge the settler common sense understanding of what *acculturation* signifies in such research. To claim that the body of an Indigenous person is acculturated was meant to provide a rhetorical veneer over what researchers such as Neel understood as a process of having been biophysically *tamed* by colonization within the US, or dominant western nation-state, domestic and its entailments. The less acculturated, or *primitive* body, was still defined as wild.

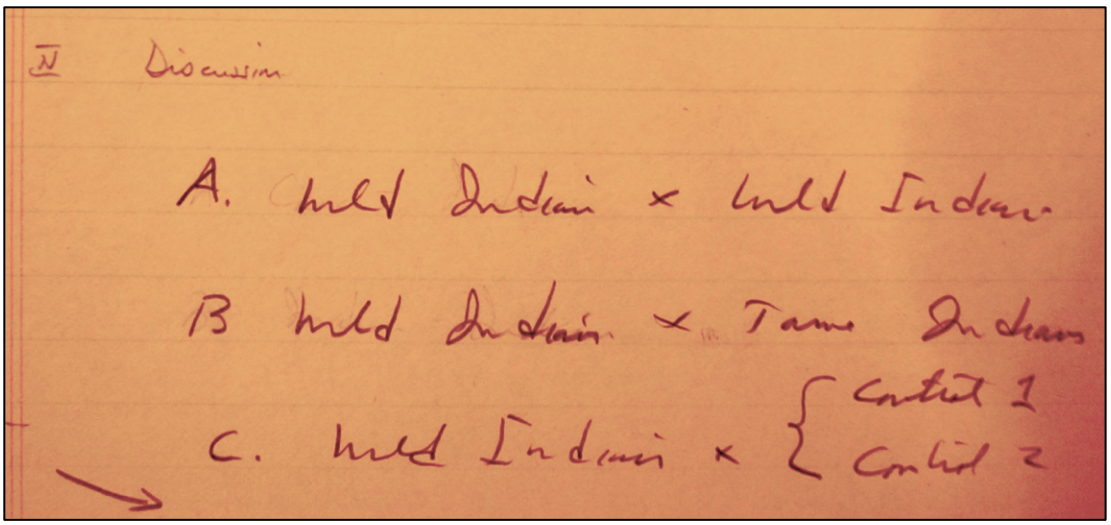


Image 9: Neel's notes for a 1982 paper on glucose tolerance among "Amerindians."[104]

By constructing a binary in which to fit genetic Indianness, Neel roots his terminology in concepts of binaries and symmetries as if they exist in nature, waiting to be described. In other words, in order to *create* a "primitive" body—the genetic isolate—as a pure baseline from which to base his theory, he had to construct its opposite, the "tame" or partial Indian. Neel's concept of rapid cultural change enframed Native people as passive receptacles for ostensibly "European" tools, knowledge, and foodways. Neel presented a broad proposal to the WHO's population genetics meeting in 1962, listing four reasons why his team wanted to "fully describe genetically" those he termed primitive communities. First, he claimed that their populations were small and "manageable." Second, he claimed that their "cultural level" was "representative of the history of all mankind" (Neel 1962a) and that therefore their genes, shaped by natural selection and their cultural practices, would be representative of pre-civilized man. Third, Neel noted that there was technology and techniques for this kind of study newly available, including the airplanes to fly indigenous blood samples to be frozen back in US American laboratories. The last reason he listed was the level of isolation in which the group lived, which was a sign, for Neel and Salzano, of relative "cultural autonomy." Neel laid out a framework in which Indians were able to live in four stages of relation to non-Indians: no contact, intermittent contact, permanent contact, or full integration. Isolation was a key factor for the scientific integrity of their research.[105] The abstracted space of "isolation" is what makes the "primitive" body one that is full of data: natural, and outside of history. The concept of European contact is dehistoricized, pacified, and decontextualized, and figures Europeans as the only creative active agents of history. Indians are figured as the ones who are the passive recipients of 'contact,' a meeting envisioned as a one-way transference of culture that inevitably draws the native toward

[104] James Van Gundia Neel Papers, American Philosophical Society, Philadelphia, PA.
[105] For a more in-depth discussion of these factors, see Radin (2013), in which she analyzes not only the salience of these factors to Neel's research, but also the contemporary critiques of Neel's work that come from within the discipline of anthropology.

civilization, rather than a space of transculturation (Pratt 1992), violence, dispossession, and disease (Blackhawk 2009). To frame Indigenous people as passive receivers of the Western world willfully ignores the political economies of trade that emerged over centuries between various Indigenous and non-Indigenous peoples, technologies and knowledge of Black and Indigenous people that shaped and built these empires (Carney 2009, Wisecup 2013) and elements of choice and coercion in the creation, adaptation, and exchange of new techniques and technologies. In other words, Neel's anti-Indigenous framework figures Native people as merely objects subjected to the forces of 'nature' and genetic change, while Euroamericans are active and creative agents of historical progress.

The design, practice, and assumptions of Neel and his team's research initiative was predicated on two related understandings: that American Indians in the US with diabetes were no longer biologically authentic Indians, and that their high rates of the disease were due to an anthropologically designated shift in which genetic susceptibility was triggered by the force of naturalized 'cultural changes.' No longer deemed a collective cultural or political entity, the partial Indian, caught in between the pull to savagery and tradition and unable to *acculturate* to civilization, became merely an individual point of racial data to be recorded and managed through public health studies. Settler anxieties about health and progress of the nation as a species-body were assuaged through research that refashioned earlier biological theories of degeneracy into modern population genetics. The problem, in this settler scientific framework, was with the body and blood of the Indian, not with Western civilization.

The partial Indian is the acculturating Indian in Neel's work, and is both a consistent and a shifting figure without an internal logic. At early moments when Neel theorized his work during the height of the Termination and Relocation era, Neel configures a partial Indian as one biophysically unable to adapt to civilized society. Part Indian, and part 'American' or civilized, this figure's body is read as one inevitably suffering or dying, due to a 'failed' cultural transition. Assimilation, in this framework is a death sentence for the partial Indian, though one with no executioner. Importantly, Neel and Salzano (1964) frequently cited comparisons of "primitive" to "White" or "Negro" blood group data, though neither "White" or "Negro" is divided into any kind of group by geography or people beyond the blanket racial descriptor. An inherently anti-Black category, the partial Indian is thus a figure that works to disappear the subject position of Indigeneity vis-à-vis premature death or subsumption by *whiteness*. The workings of Black hypodescent—in which the racial category of a person is defined as Black if they have any Black ancestry no matter how distant—trumps Indian blood quantum and serological frequency measures that were categorized as "Indian." Thus, Neel and Salzano figure "Negro" blood group data as categorically separate from that of the *primitive*, and thus also of the partial Indian. Denying the possibility of Black Indigeneity, and both disappearing Indianness into Blackness while excluding Black Native people from their tribal-national claims and belongings, Neel and Salzano's *partial Indian* is constructed through intersecting modes of racial domination.

Neel expressed a certain sense of care for the primitive object of his research that he constructed, in which a liberal humanitarianism absolved these new techniques of domination. Precisely *how* this care was narrated and the technoscientific practices that shaped its content, was entangled in global circulations of capital, knowledge, bodies and materials, and forged in a crucible of US colonialism. In the decades following the

second world war, researchers and scholars in disciplines concerned with human beings tended towards a framework that produced a biologically unified humanity through narrating a shared evolutionary past. This was a moral and sentimental move as much as a progressivist intellectual one. The proclaimed morality of shared humanity and shared history, in the realm of such biomedical research, however, was built explicitly through anti-Indigeneity. Though Neel was a medical doctor as well as a population geneticist, he did not venture into Yanomami territory in Brazil to heal the sick, as charges against his anthropologist travel partner Napoleon Chagnon later detailed.[106] Neel and his team collected Yanomami people's blood, froze it, and shipped it to labs in the US in order to extract data for their "pure science" which, they argued would attend to the future of so-called Western civilization (Neel and Salzano 1964). They constructed racial framework to delineate an isolated 'primitive Indian community,' fetishizing the data held in genes in Yanomami blood as a precious material: a natural resource on a scientific and development frontier. Importantly, racial hierarchies are also spatial and temporal rankings. Traveling from the United States to Yanomami communities in Brazil to collect and analyze blood samples, Neel and his team configured their knowledge as travelling through time. His research, like that of much of the *human adaptability* arm of the IBP, constructed the Indian as an anachronistic body and their communities as anachronistic space:[107] a time-travel portal through which researchers can travel back in time to answer questions about their own evolutionary ancestry, as a means to secure their own futures. The primitive body is the landscape, the gene the frontier, and the settler subject is its explorer. As El-Haj (2012) shows, the human genome is an *archival field* that can be read and translated in multiple ways. Under the rubric of civilization and progress, constructing a primitive ancestor within the genes of other out-of-the-way living people reinscribed and naturalized a hierarchy of human difference in which settler patrimony to US American space is affirmed through the power of knowledge production about the Other.

In later moments, when Neel writes after the rise of the Red Power movement in the US and the end of formal Termination policies, Neel's narrative changes. For example, in a book chapter published in 1977, Neel insists that "AmerIndian" health is inherently quite good, but was affected by "culture shock" that was a result of exposure to new diseases of "civilization," more dense populations, deteriorated sanitary conditions, and a rise of consumption of refined carbohydrates, and psychosomatic factors (Neel 1977, 6). Rather than mere biogenetic risk factor, Neel constructs a more

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[106] The book that charges Chagnon with inciting violence among the Yanomami and ignoring a measles outbreak among them despite having access to the vaccine was written by Journalist Patrick Tierney (2001). The book, *Darkness in El Dorado: How scientists and journalists devastated the Amazon,* is as controversial as Chagnon himself.

[107] The enlightenment and the imperial project, McClintock argues, are intertwined with and reproductive of a concept of progress particularly led by nations within Europe, based on a conflation of geographic space with historical time. This conflation, which produces in the colonies the *anachronistic body* of the Other and *anachronistic space* where progress did not occur, were reproduced through these mediums. Civilizing other 'races' abroad also 'domesticated' space through the de-historicized trope of the family in the metropole as "the formative ambiguities of gender and class were managed and policed by discourses on race" (McClintock 1995, 77), in a kind of boomerang effect.

socio-behavioral model, which nonetheless is devoid of an analysis of power and colonialism. In a departure from racial science practices of the early 1900s, the 'thrifty gene' was never taken to signify that the Indian was *inherently* defective. Neel instead molecularized an imaginary of atavistic Indian practices, and molecularized and medicalized the distance—configured as causality and as difference—between this imaginary of "authentic" Indianness and contemporary Native lives in the US. In his framework, Neel describes 'cultural change' as a result of 'contact' with new modes of production, development and industrialization. Through this Manichaean divide and settler move to innocence (Tuck and Yang 2012), the hypothetical thrifty gene is imagined as a corporeal, biological defect within the body of the partial Indian. The distinction between inherent and contingent genetically defined weakness and racial degeneracy in the thrifty gene hypothesis is vaguer than some researchers would have imagined in a post-UNESCO statement academy (Reardon 2005).

Neel's work on Indigenous people within the contiguous US American nation-state boundaries were made spectral in the latter years of Neel's project. Yet their lives, and deaths, are at its core. The conceptual and material space they occupy in this spatio-scientific configuration is not the frontier, but the settled nation-state, *in* but not *of* the nation. Their bodies were pre-configured as tragic beings of civilization and progress, unable to live fully and acculturate to US American ways of life, yet unable to be biologically truly Indian. The marked rise of diabetes in Native communities was the *raison d'être* for Neel's' work on diabetes and the thrifty gene hypothesis, as Neel himself notes in reflections on his career (Neel 1999). Through the thrifty gene hypothesis, observations in changing rates of disease were articulated through the narratives, practices, and discourses of an expanding US American settler-nationhood. Thus, as the next section will show, this project underwrites, and is underwritten by, the Termination policies that deemed Native peoples unable to govern themselves, territorially or corporeally. At the same time, such practices re-affirmed and legitimated claims to nation-state space, land, resources, and institutions that were the material and meaningful basis of post-World War II capital expansion. Animated by the use of travel, distance and the production of "isolates," Neel's work relied on the lives of Indigenous people as much as if not more than their blood samples in order to make this science. Yet, this research on high diabetes rates that supposedly 'had' to be done far from the population of concern failed in both places. Neel's search for biological meaning in his construction of racial difference through the thrifty gene concept fell flat and has never been confirmed (Speakman 2006). But the thrifty gene concept, as this chapter's interlude noted, continues today to be socially and materially meaningful (Montoya 2011), and the search for Native American DNA does not cease to be historically and politically meaningful in the settler context (see Abu-El Haj 2012, 22). The assumption of ancestry DNA is that biology itself will diagnose one's identity and subjectivity. With the thrifty gene shaping everyday discourse and treatment of Native people, that subjectivity is continually produced as diseased and defective, and quite unlucky.

Racial serology in Haudenosaunee country

When the founding researchers of racial serology crafted human blood groups as an object of study, they started by focusing on individual antigens or larger blood group

systems[108] which they understood as a stably inherited mendelian feature. As such, they argued, it would be a stable feature by which to measure the inheritance of race if one could determine which antigens or blood groups existed at what rates in particular "racial" groups. Of course, the particular racial groupings of human difference have always been contested, and throughout the 1920s and into the 1930s various racial serologists developed differing, contradictory, or sometimes arbitrary groupings (see Marks 2012, S163). Nonetheless, superimposing concepts of "race" onto their data, racial serologists constituted new meanings and practices around old understandings of racial data. After World War II, as noted in the previous section, there was an attempt in the academy and research institutions to shift away from these kinds of purely taxonomical questions, and delve into what was termed a more humanistic approach, by studying the place of the human in nature vis-à-vis the study of a *population* as a representative sample of a group of people that moved away from previous racial and racist research. Yet the rhetorical move to population, and the claims to humanist progress, still belied the material practices and political implications of this research on the ground.

This scholarship was, researchers noted, at the crossroads of "medical genetics and race genetics" (Gates 1963). New blood antigens continued to be delineated. Of importance to this analysis: the Diego-a antigen was found in 1953 in Venezuela after a baby died three days after birth due to hemolytic disease, and the blood group would soon be given this family's surname by researchers at a center in New Jersey, USA. By 1955, a group in Venezuela published a paper with the title, "Investigation of the Diego Factor in Venezuelan Indians: Clinical and Anthropological Importance" (Layrisse et al. 1955). This publication proposes that the antigen should be called the "Indian Factor," as it seemed to have less direct clinical importance, but could be a window into creating a story about human population and migrations in the Americas. A year later, further research suggested that the Diego-a blood group was present in a number of people from China and Japan who lived in Venezuela, thus suggesting that rather than a South American Indian blood group, it was a "Mongoloid" blood group—or a blood group that was present in a higher proportion of Asian and Indian populations across the Americas (Junqueira et al. 2002). With excitement that this newly found blood group could shed more light on the Bering Strait theory, research continued on this novel antigen among South East Asian and American Indian populations, and the question of the Diego-a antigen was soon introduced to upstate New York via researchers at the University of Buffalo.

Thomas D. Doeblin, a human genetics researcher and a medical doctor who taught and conducted biomedical research at the University of Buffalo's School of Medicine, was a key figure in these studies. An author on five published papers about Seneca genetics and rates of diabetes, and first author on four of these studies, he was

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[108] Today, there are 346 known antigens that adhere to the surface of (most often) red blood cells—either glycoproteins, glycolipids, carbohydrates, or proteins—and these form 36 different blood group systems. Blood group systems are formed when two or more antigens correspond to one particular allele. The two blood groups that most readers may be familiar with are the ABO blood group and the Rh(+/-) blood group, which together determine whether one is blood type A, B, AB, or O, and with a corresponding + (positive) or – (negative) which identifies one's Rh status.

invested in many of the same questions as Neel and others, though related to the Native people near his institutional base. Just an hour south of Buffalo, Cattaraugus was able to host a weekly medical clinic for Seneca and others living on territory. Doeblin, over the course of the five years that he was doing research on the Seneca, would come every other weekend to offer medical services and to take data from Seneca – presumably his patients or other visitors – while he was there. All of his studies were funded at least in part by grants from the US Public Health Service. These visits ended in 1971 (Hathorn 1972), shortly after he finished publishing studies on Seneca genetics and disease rates. He, along with other medical researchers at the University of Buffalo, Lawrence Frohman and James Mohn, published multiple papers on Tuscarora and Seneca genetics, blood groups, and diabetes rates, between 1963-1968. Each of these papers drew specifically on Neel and Salzano for their questions and concerns, and their metrics and methods.

The first researcher to begin testing for the Diego-a antigen, which I described in the previous section, among Haudenosaunee was James F. Mohn, a member of the Blood Group Research Unit at the School of Medicine at the University of Buffalo. His research appearing in the May 1963 edition of *Nature*, Mohn (Mohn et al. 1963), wrote a short commentary on the hematological research he had done on the Tuscarora. One third of the article consists of a brief gloss of the history of the Tuscarora: a historical narrative drawn from Indian Agent and Geographer Henry Rowe Schoolcraft's 1847 "Notes on the Iroquois:" as all genetics research at the time, anthropological claims about cultural practices was the basis for Mohn's genetic claims. Schoolcraft's narrative, particularly as Mohn recapitulated it, was devoid of all impacts of colonialism and occupation on Tuscarora history. Mohn and his research team would test 53 Tuscarora people who were residents of the reservation, near Lewiston, NY, and tested specifically for the Diego-a antigen. Mohn et al found that 11.3 per cent of his subjects contained the Diego-a antigen, and would explain away the fact that Tuscarora who self-reported to be full-blooded had a lower rate of Diego-a than those who were "admixed" to be an effect of a small sample size, and that relatives were included. That such a small study, done with few controls (such as sampling that did not exclude relatives), was included in a top-tier journal such as *Nature* may have derived from his findings – this was the highest reported frequency of Diego-a antigen among any Indian group in North America at that time.

A few years later, Thomas D. Doeblin would join with Mohn to extend this testing to the Seneca people residing on Cattaraugus territory. Their first study published on the blood groups of the Seneca (Doeblin et al. 1967), drew more directly on the work of Neel and Salzano. Doeblin and Mohn calculated each blood group feature among the Seneca, using an IBM 101 Statistical Machine that made analysis of such data newly possible, which Neel and Salzano (1964) had summarized in the previously mentioned article. They found 375 people to take part in the study, all of whom report to be 50% blood quantum Seneca, or more. The anthropological distinctions of the Seneca, and lack of analysis or understanding of their history, stands out in Doeblin et al. For example, the *history* section reads that the Seneca, "were given a block of New York State somewhat to the west of their original territory, but most of this was quickly sold, and the Indians came to live on smaller portions called 'reservations'" (Doeblin et al. 1967, 700). Such a gloss of the colonial violence that placed Seneca where they live today at Cattaraugus and Alleghany, among other territories is highlighted by the farcical claim that the Seneca were "given a block of New York State," suggesting that Native peoples could be gifted

their own lands by seemingly timeless US state governments. Beyond this historical gloss, anthropological information was drawn upon sparingly to construct a mythos of racial purity, and thus the purity of their data. Doeblin and Mohn conjecture whether the blood of "captives" such as the famous white woman Mary Jemison who was adopted into the Seneca in the 1700s, or the blood of recent Puerto Rican farm laborers, might have caused racial mixing. Loose understandings of "Iroquois" familial practices play into their concerns about "consanguineous unions," which would skew the accuracy of their data regarding what they call a participants "degree of Senecaness" (Doeblin et al. 1967, 702). Having found that only 3.5% of their sample population had the Diego-a antigen, the paper's authors struggled to justify its findings.

In a 1968 paper, Doeblin and a new research associate, Dr. Lawrence A. Frohman, did a more detailed study of Seneca genetics. The authors write that the Iroquois are an "advanced aboriginal culture" but that the majority of studies that exist on the Seneca of the Iroquois are anthropological and historical, not genetic. Yet many of the data extracted from their Seneca subjects are not serological, or directly from the blood itself. Like most blood serology tests for racial purity in physical anthropology and population genetics at the time, racial categories and their measures were determined at the outset. Unlike Neel's work in Brazil, Doeblin and his associates did not construct signifiers of Indianness in ethnologic terms, but solely in blood-quantum. Doeblin and Frohman's study began with a set of interview questions for any participant to determine what he termed their "pedigree," as he terms it: in other words, what degree of Indian blood they have. Each person included in the study would have been interviewed to determine their so-called pedigree. Questions would have included self-reports of their own blood quantum, and that of their parents and grandparents. They would have also been asked how much blood from other non-Seneca sources would be present. In an absurdly circular logic of biologistical constructions of race (Fullwiley 2008), Doeblin and other researchers involved constructed tautological genetic descriptors of Indianness. They compared individual's self-reported "degree of Senecaness," or blood quantum, with the presence of the Diego-a antigen in their blood to determine that it was a molecular signifier of Indianness. Inevitably, as with all studies of this type, each person interviewed would have been asked about the possibility of incest within their families, as having children with blood relatives can skew the outcomes of blood serology studies. A possibly offensive and derogatory question in any setting would take particular discourteous meaning in a Haudenosaunee community. The social norms around having children with even a distant cousin are related to Haudenosaunee clan membership, and discussions around such relationships and clan membership could relay more private information than a Haudenosaunee person would want to share with a researcher.

Doeblin included significant musings on whether Seneca have distinct physiological traits from white or other "Amerindian" populations. Over half of the results and discussion section is taken up with this data, rather than the genetic and serological data, even though the introduction and the paper title—*Genetic Studies of the Seneca Indians: Haptoglobins, Transferrins, G-6-PD Deficiency, Hemoglobinopathy, Color Blindness, Morphological Traits and Dermatoglyphics*—forefronts the genetic data. The paper analyzes red-green colorblindness tests of 261 Seneca who reported being 50% "full blooded" or greater. Doeblin then compares their rates of colorblindness to a population of so-called "hunters and food gatherers" from previous larger study,

published in a 1962 issue of the journal "Eugenics Quarterly." Doeblin's interest in morphology, or the structure of the body, also takes up a significant part of the paper: clinodactyly (shortening and curve in the pinky), mid-digital hair (hair growing on the back of the finger after the second joint), attached ear lobes, hyperextensibility of the thumb, and a gap between the first and second toes were each measured. There is also a significant, page-long section on "dermatoglyphics," or fingerprint pattern analysis based on the frequencies of whorls, ulnar loops, arches, and radial loops, in which he claims that "the Seneca…follow the usual Mongoloid pattern" (Doeblin et al. 1968, 258). The broad interests of this paper suggest that it was conceptualized as an introductory review of the question of the racial designation of the Seneca. In the introduction, the authors claim that 40% of the "gene pool" in people who claim to be full-blooded Seneca is in fact European, yet they do not return to this claim in the discussion or summary. Making a frivolous claim about Seneca pedigrees and biogenetic racial purity without bringing their dubious bio-data to bear, Doeblin et al. weigh in on questions of Seneca and Haudenosaunee racial authenticity which pervaded upstate New York in the Termination and Relocation era. Constructing them as partial Indians, Doeblin et al. actively ignore the claims to belonging and Senecaness that their subjects make, and propagate scientific measures through which US colonial conscriptions of Indianness capitalize on the allure of specificity (Conrad 1999) of serological data. These measurements would have been taken during a Seneca person's visit to the medical clinic at Cattaraugus, or in their own homes. Taking the Indianness of Seneca peoples as a measurable, biologically relevant feature, Doeblin and Frohman use the space of the reservation clinic as a site of data extraction.

The research of Neel and Salzano and then later Doeblin, was framed specifically by the objectification of the Indian as merely another human population of the Americas which gave credence to colonial frameworks of arrival and belonging. Doeblin frames his research around a 1964 paper written by James V. Neel and Francisco M. Salzano for baseline frequencies of blood group data among "North American Indians," a paper written after their first trip to Brazil, with Keiter, Junquira, and Maybury-Lewis. Neel and Salzano published this paper as part of the Cold Spring Harbor Symposium's journal, with their thoughts about the ripest avenues for research in the genetics of "the American Indian." They begin, "The American Indian today presents a series of unusual … biological, medical, and humanitarian challenges" (Neel and Salzano 1964, 85). In introducing their population as an object, they begin with the story of the Bering Strait on the first page, referring to American Indians as an "immigration" population whose "descendants" now "occupy" all the ecological habitats across the Americas. The Bering Strait theory states that the first human occupation of the land today territorialized as North America or the United States came from human movement across a frozen land bridge from Asia. The Bering Strait theory is one that attracts earned suspicion and critique from many Native people including scholars, both as a dominant narrative (TallBear 2013) and as a scientifically weak theory (Deloria 1997; Ardelean et al. 2020). Regardless of its truthfulness or untruthfulness, which is outside of the scope of this chapter, the theory is here conveyed by Neel and Salzano in discourse that places peoples Indigenous to North America as *immigrants*. This rhetorical move discursively undermines origin stories and historical understandings of arrival and belonging, as well as histories of colonialism and any tribal land and legal claims. Collapsing the present

conception of "arrival," such as through travel on a boat or airplane, with that of a long and varied history of migration and movement over time, this narrative is stubbornly disingenuous.

Doeblin and Frohman frame the Seneca in their work in ways that hold fast to particular racial assumptions of purity that retrench a colonial understanding of race and space. Describing the Seneca at beginning of the 1968 paper, they note that their sampling pool consists of the Seneca Nation of Indians, which they describe as members of "democratic organization responsible for the administration of Indian lands." In the 1969 paper, they term the Seneca Nation of Indians an "organization, founded in 1848 by members of the Seneca division of the former Iroquois Confederacy" (Doeblin et al. 1969, 613). Placing the Haudenosaunee (Iroquois) confederacy in the past, they depoliticize their presence on the land by name the SNI merely an "organization." In this article they also refer to the Seneca, scientifically, as a "semi-isolate population," which they argue emerges from the tendency of Seneca people to live and make families with other Seneca people over other people. Here, they use the term *isolate* as an adjective, not as a descriptor of their spatial position in relation to non-Seneca people, but as a descriptor of their social and sexual reproductive lives. Drawing data from those Seneca people who still lived on Seneca reserve territories, Doeblin and Frohman affirmed the project of US colonial rule that affixes identities to tribal territories in an "ethnic spatial fix" (Moore 2005) that denies Haudenosaunee mobilities and practices of descent.

While in other areas of the country public health studies were conducted—however flawed they were as noted in section II of this chapter—none were done in upstate New York in this era. Beyond these genetic tests listed above, there are few health studies that exist from the Termination Era. In two later publications, Doeblin focuses specifically on rates of diabetes among the Seneca. His findings in this study are largely inconclusive, noting that not only is it unknown whether the high rates of diabetes among the Seneca are due to inheritance or environment, but that it is not properly known if diabetes is a single disease. Besides two master's theses published by women who attended the University of Buffalo, the only studies that exist from this era are in the fields of physical anthropology—including genetics studies, craniometry, and consanguinity—and in ethnological studies of health beliefs, residence patterns, and child-rearing practices. There were more studies from the late 1970s that began to look somewhat more critically at health issues, such as on diet and diabetes, and the level of health care infants have access to on various Haudenosaunee territories. Today, many people in Haudenosaunee communities have both long and recent memories of extractive biomedical and health research practices (Haring 2015; Hoover 2017), and notions of inherent disease susceptibility disrupt Indigenous knowledges of the self. Circulations of biomedical knowledge and blood samples did the work of affirming narratives of settler sovereignty of body and space, portending to link settler scientific narratives with an ontological state of being Indian.

Conclusion: body futures, data, sovereignty

The realm of possibilities in biomedical technoscience and population genetics research on health has changed in the last half century, and debates around the use of 'race' as a biomedically significant marker remain contested. The sequencing of the human genome, followed by the completion of the first Human Genome Map in 2000,

was boosted with promises of medical advancements: personalized medicine and targeted therapies were thought to be a potential wellspring for health therapeutics and for investors. This technology and discourse emerged in a context of the privatization of research alongside the increasing personalization of medicine and individualization care (Abu El-Haj 2007). However, while the discourse has focused on the value of this research to the *individual,* much of the biomedical and statistical work with this data has worked at the level of the *population*, often racially or ethnically defined (Duster 2015). The public pronouncements of genome scientists in the year 2000, that race was not a category that had any basis in scientific fact, generated an ongoing and multi-faceted debate. Researchers of the social determinants of health continue to argue that race is a biomedically salient category in the sense that historic and lived experiences of rac*ism* have resulted in biomedically quantifiable and racially differing health outcomes (Chae et al. 2011). Geneticists themselves argue both for and against using 'race': some note its ontological nonexistence, some imagine they are skirting the question by rebranding racial categories as "ancestry" or "admixture," and others cite the paucity of research on minority groups in the US as reason to continue use of the categories for comparative purposes (see Fullwiley 2008). Debates around consent of Indigenous peoples' DNA in scientific research has become a point of sharp contention particularly since the 2009 *Havasupai Tribe of the Havasupai Reservation v. Board of Regents and Therese Ann Markow* case, in which the Havasupai Tribe sued Arizona State University for misusing their genetic samples (Reardon and TallBear 2012). This case and further analyses of so-called Native American DNA of the last decade have shown the political and personal implications of ancestry testing and Native American genomics for federal recognition, enrollment claims, and the return of land or the repatriation of ancestors and materials (TallBear 2003; Reardon 2009; TallBear 2013).

In this chapter I have historically resituated these analyses to a historical moment when a new molecular formation of anti-Indigenous racism arose, with new fomentations of Indianness in US colonialism. The analysis that race is a social construct, or a social construct with material consequences is an oft-cited truism. Yet we live with the material consequences of structures and institutions that were produced in an era when race was taken to be quite biological, and quite consequential. And biophysical aspects of that social construct that have come to be known as racial—phenotype, "blood" and heritage, and ancestry DNA—are variously taken up as means to police boundaries, inclusions, and exclusions in Indigenous life in the United States. While President Nixon formally ended Indian Termination policies in the US in July of 1970, the study of Indianness as a medically or biologically significant source of difference remains intact, particularly in modern genetics research. As Fullwiley (2008) found in her ethnographic research in two medical genetics laboratories, there is a move today among scientists to privilege genetic variance, and particularly racialized variance, as either a source of health disparities or a targeted site of alleviation of those disparities. Social determinants of health, or the socioeconomic and sociopolitical conditions that influence both group and individual health outcomes, cannot be conflated with genetic variation. Most of our genetic material is shared, among all those living beings defined as genetically human; phenotypes that so deeply shape social worlds don't run very deep in terms of genetic variation. Nonetheless, very clear health disparities do exist. Native Americans, African Americans, and Latinos experience much higher rates of diabetes, for example. Considering that the

way many people think about race, and how it is structured into society, is often erroneously mapped onto genetic diversity (Duster 2003; Fullwiley 2008), studies suggesting that racial health disparities have genetic components work to reconfirm these racist constructions of Indianness.

Often, genetic disease risk is quickly translated in parlance and practice into "racial" disease risk which is inherent to people who are interpellated in various ways into racial groups. There is some work as well to move beyond group-based genetics. The Human Genome Map and the Personal Genome Project brought the genome into the idea of personalized medicine: interest in individual differences, it is hoped, would trump the problematics of group differences. As of now, the cost of such sequencing is prohibitive, and the applicability of genomics in personalized medicine has been limited. Additionally, many people warn of the ongoing possibilities of genetic discrimination. The Genetic Information Nondiscrimination Act of 2008, which put protections in place to guarantee that health insurers and employers could not discriminate on the basis of genetic information of an individual, doesn't cover Indian reservations, geopolitically, nor does it cover Veteran care. More recently, there has been a surge of private companies that profit off of the hype of admixture, such as 23andMe, sell genetic data to pharmaceutical companies. Though, they note, this data is disidentified at the level of the individual, if it is used again to make disease risk calculations on the basis of race, or other group definition, then the line between individual and group rights to privacy in regard to genetic information becomes quite blurred. The Human Genome Diversity Project attempted to get away from the idea that there were pure races by leaning on the concept of "admixture." This was touted by some as potentially liberating, and a move towards greater tolerance: a biologization of the hype of hybridity (Mitchell 1997). The concept of admixture still reifies race in the sense that it connotes that there were, at some point, pure bounded "races" that then later mixed (Fullwiley 2008; TallBear 2013). In regard to Native American DNA in particular, the concept of genetic admixture further mythologizes the date of 1492 as a new world/old world divide. The temporality of genetic admixture perpetuates the idea that the old world is somehow static, and that genetic change only arrived with European people.

By conscripting existing ideas of Indianness as atavism into a genetic admixture marker here termed "Native American ancestry," Indianness is always already constructed as a biological remnant and a piece of the past. The body of the Latino or Mexican in the work of Montoya (2011), or the nebulous 'Native American,' become configured as inherent carriers of a "risky" gene. Indians become the biological bearers of socially accepted risk (Jain 2007). The Indian as gene is only defined relationally to itself: a purely statistical creation in which heterogenous multiplicity, or the repetition of the sameness within a given set of single nucleotide polymorphisms (SNP), makes the object. There is nothing spoken, lived, practiced, or future-bound about the Indian figured as such. In other words, not only is the Indian figured as atavistic, but, through the concept of admixture, the subject position of the Indian is slated to end entirely (see Simpson 2014). One's Indianness that they bear is imagined to be a marker of risk itself. This particular molecularization of race as anti-Indigeneity, as I have shown in this chapter, has multiple valences that reverberate today. At a moment when the porosity of the US/Mexico border to Northward migration is a site of white settler anxieties, amplified by economic dips and crises (Baker 2010), and tribal sovereignty is continually

threatened, this genetic re-inscription of anti-Indigeneity is violent, particularly in a context in which there are still large numbers of groups and individuals arguing for European-American superiority and white supremacy (Fullwiley 2008). The assumption of genomic medicine and genetic disease risk is that individuals who receive this information will then take action to increase their chances of gaining particular markers of health and quality of life (Abu El-Haj 2007). In some public health literature, the proportion of disease risk is framed as a degree of partial Indianness, and suggest that this genetic deficiency can be overcome through proper choices and behaviors. Such assumptions are vacuous in a context in which many schools on reservations have no gym, or no PE teacher (Warne 2009), Indian Health Services are chronically underfunded, and when 65% of the federal research budget for diabetes goes to genetic epidemiologic research (Montoya 2011).

Native peoples today are made to contend with the forces of ongoing colonialism that affect their lives and wellbeing at the same time that they must contend with these racialized figurations that shape their ability to seek recourse against historically extractive data practices and their legacies. The Yanomami, from Neel's work, have also begun their own processes of reckoning with histories of data extraction. For decades, the frozen blood samples of the Yanomami, taken by Neel and his team, were held at SUNY Binghamton in upstate New York, and at Penn State University. In 2015, 2,693 of these blood samples were returned to the Yanomami that live within Brazil's borders. Davi Kopenawa, of the Yanomami, had been advocating for years for its return, and remembered its extraction. He is quoted in a BBC article, "I was 10 or 11, and the non-Indians [American Scientists] came to our community…The missionaries told the village elders that we had to give blood…An [American] anthropologist talked to us about the blood, this blood that they should not have taken and we should not have let them take" (BBC, 2015). Elizabeth Hoover's close work with people at Akwesasne Mohawk territory, which sits on the US/Canadian border at North-Central New York State, cites the devastation of the post-World War II boom era in the US for Native peoples, and the importance of Native sovereignty to recover from toxic histories of dispossession. Hoover shows how a key aspect of this recovery has been the work that Akwesasne has done to institute an embedded and historically relevant process of screening research projects that are done with them, rather than on them. The Akwesasne Good Mind Research Protocol, which was developed by the Akwesasne Task Force on the Environment that coalesced in 1994, has been used in other Haudenosaunee communities as an example. As I discussed in the introduction to this dissertation, describing and defining racism, Gilmore notes that in the US racism is "the state-sanction production and exploitation of group-differentiated vulnerability to premature death" (Gilmore 2007, 28). Discussing how certain bodies are made available to injury under racial capitalism and empire, Puar's (2017) conceptualization of the right to maim draws an understanding of debilitation, not only death, as a site of racism. In the case of Haudenosaunee communities and among other Native peoples, this debility takes on a dual and double-edged meaning: not only are lives shortened and diseases suffered at greater rates because of ongoing colonial structures, but also Native people's agency, lives and places are conscripted into figurations of an inherently debilitated "Indian."

Conclusion

"The callers of names cannot see us, but we can see them."
-John Trudell (Santee Dakota)

It was not until 1985 that the landmark *Report of the Secretary's Task Force on Black and Minority Health,* more commonly referred to as the Heckler Report, named racial health disparities explicitly as failures of the state to provide proper access to health care services to people of color. Institutionalizing what people and communities who had been racialized had understood in their own various ways for decades, this report was the beginning of a move to make health equity –or equal health outcome – a goal within the US Department of Health and Human Services. It was notably the first time that the health status of various "minority" groups—here including "Blacks, Hispanics, Asian/Pacific Islanders, and Native Americans"—were all compiled into a single report where their health outcomes would be compared to those of white people. Racial health disparities in this report were defined as "excess deaths",[109] and since this time, finding ways to measure and reduce such health disparities has been a significant node of analysis within public health as a practice and a field of discourse. The assumption that making differences in disease and death rates calculable and knowable can both effectively communicate and then moreover *resolve* those differences is a leap of logic, and perhaps of hope.

My dissertation has shown that at key moments in the last 250 years in the US, the measure of racial difference as a biologically-relevant attribute among Indigenous people has, time and again, been a technique of power. The measure and making of the Indian body as unable to labor, undergirded a post-revolutionary revisionist historiography that deemed "Indian land" uncultivated—waste—affirming Euroamerican settler governance. As I showed in chapter 1, the discourse of this revisionist historiography continually reemerges each time the Doctrine of Discovery and *Johnson v. M'Intosh* is invoked into law again. Ginsburg's agnosia to Oneida sovereignty sits squarely with a Euroamerican settler sovereignty that throttles any expansion of Indian sovereignty in the false name of order and good governance. The performance of order and reason itself through acts of measure and filing, as I showed in chapter 2, became a technique of surveillance of Indian children and families in Indian Boarding Schools, particularly the Thomas Indian School. Measures of health and wellbeing constituted a settler selfhood that was absolved of the explicit violence of, not only the very recent past, but also of breaking up Haudenosaunee families and placing children in a space of isolation and loneliness, in a project that worked in tandem with the dispossessions of allotment. The post-World War II shift in technologies and techniques of measure, as blood serology and population genetics proliferated alongside US policies of Termination and Relocation, biologizing markers of Indianness as *partial* made possible a new range

[109] Today, health disparities are largely understood to also include premature as well as excess deaths among non-white populations in relation to baseline life and disease expectancy of white populations in the United States.

of dispossession and invisibilities of lived Indigeneity. Colonial processes of subjectivation thus shape Indian life as dismembered from land, from family, from one's own body. In Haudenosaunee country, these techniques of power in turn shape peoples everyday lives and the textures of Haudenosaunee peoplehoods. My dissertation documents this history to evince how measures and metrics, and a reliance on more and more accurate data, are not strategies necessarily embedded in an ethic of decolonization and regenerating Indigenous peoplehoods.

Today's world is full of examples that caution against Indigenous peoples' inclusion in measures and data tables as a quantified move towards liberal inclusion. As I write this conclusion, the United States is in the middle of its fourth month of dealing with COVID-19. There have been over 135,000 deaths in this time span. These deaths, and those left grieving in the wake of these deaths, spread unevenly across space and through communities structured by their racialization and by racism. The circulations and wakes of COVID-19 are largely determined by the compounding factors of racial capitalism and US colonialism: higher rates of comorbidities such as diabetes, higher rates of "essential" jobs, lower rates of insurance, less access to quality healthcare, and discrimination in spaces of healthcare. The tensions at the heart of this dissertation—regarding the effects of creating and circulating data on racial differences in health outcomes and susceptibility—has come to the fore again in this moment. On the one hand, the US Center for Disease Control (CDC) has given states in the US open access to raw data on coronavirus, but has refused multiple requests for this same data from the top 12 tribal epidemiology centers in the US. These centers, such as the National Indian Health Board and the Urban Indian Health Institute, were given the title of 'public health authorities' under the 2010 Affordable Care Act, but CDC officials continue to refuse cooperation. Without this data, these centers have no ability to track the disease across the US' urban, rural, and reservation populations to understand how it is spreading, and precisely why Native people seem to be dying at higher rates than others. The CDC website at the time of publication of this dissertation does have a special section on Coronavirus for tribal communities. However, the only Native-specific guidance the CDC provides is how to deal with isolation by altering one's behavior, how to alter one's behavior in multi-generational homes to reduce infection, and how to bury a large number of people dead from the virus ("Coronavirus 2019…" 2020).

Yet on the other hand, higher rates of COVID are being cast through the prisms of US colonial racism that my dissertation analyzes. For example, one hospital in Albuquerque, New Mexico, has been profiling women who arrive in labor and ready to give birth: if the look Native American, and reside in a certain zip code deemed to be on a nearby reservation, the woman is singled out as a particular threat. The rates of COVID-19 in the four corners region of the Navajo, Hopi, Ute, and Zuni peoples have been some of the highest in the country. These racially- and spatially-profiled women were given a COVID-19 test upon arrival, before giving birth to their infants, and were quarantined separate from their newborns until the results came in. Since the hospital used a COVID-19 test that took three days to process, some mothers waited up to three days to hold and bond with their newborns. These racial geographies in maternal health reveal how the circuits of data articulate the structures of US colonialism. Zip codes are the single best predictor of an individual's health that exist in the US: a meaningful quip in public health is that one's zip code is a better health predictor than their DNA code. Health equity

epidemiologists state this fact hopefully: measuring health risks and outcomes is supposed to be a way to target both health interventions and policy change. Healthcare strategists tout zip codes as a way to target interventions in hospitals and emergency rooms. But the target here became Native women who were then dispossessed of the first hours and days with their newborns, as their data was turned against them.

This dissertation has provided an analysis of how historic and ongoing colonialism delineates an ethical field of possibility for contemporary health and research justice. The binds of how to seek that justice, Land Back, or liberation in a colonial context continue to shape these possibilities. Native advocacy groups in the United States have begun to seek forms of state-based reckoning with US colonialism and its damage to Native peoples in the US, looking to analyses of the Truth and Reconciliation Commission of Canada (TRC) which was in effect from 2008 to 2015. Critiques of the politics of reconciliation in Canada show how this process has placed the violence and crimes of colonialism in the past and attempted to break with that passed through spoken apologies by heads of state (Coulthard 2014, see also Povinelli 1998). In the wake of these politics of reconciliation, and within a context of international-scale recognition of Indigenous human rights, First Nations people, largely women, have chosen the language of 'historical trauma' to become legible in an era of global human rights. It is the language Indigenous people must speak in order to be heard, and one that is enacted within the colonial binds of recognition. Million's work on the mobilization of 'historical trauma' in First Nations politics shows that indigenous self-determination has, to its detriment, been routed through gendered and medicalized models of 'self-management' and personal therapy, rather than land and sovereignty (Million 2013). The game of recognition in colonial contexts—legal, medical, educational, and scientific—is always already a losing one. As Santee Dakota poet and activist John Trudell said, quoted in the epigraph to this conclusion, Native people and peoplehoods cannot be *seen* in these contexts. Yet Native peoples, including Native scholars, need not look for recognition from liberal colonial institutions in order to maintain and regenerate Indigenous peoplehoods and kinships. In my future work, I hope to study the incommensurabilities of pairing a politics of liberal inclusion with regenerations of Indigenous peoplehoods.

Indigenous activists in the US and Canada are making critical connections between resource extraction and Indigenous reproductive justice widely understood to include women's bodies and social reproduction on the land (Konsmo and Pacheco 2016). The Missing and Murdered Indigenous Women (MMIW) movement in the US and Canada has found that Indigenous women are four times more likely to be missing or murdered than the rest of the population, and has brought wide attention to gendered and sexual violence and its relation to colonialism in North America. Indigenous data sovereignty is another contemporary concept that aims to rectify colonial histories of extractive data collection processes particularly sparked by misconduct by geneticists, by placing collection and control into the hands of tribal governments. Each of these approaches differently challenge the bounds and strictures of the colonial "settler" state, in the US and in Canada.

Improving wellbeing and health within Native communities—urban reservation, and rural—requires closer attention to the colonial origins of common measures of our lives, and our deaths. Privileging body counts, or accounts of bodies disease, over communities and relations will only serve to perpetuate the colonial practices, structures,

and racial geographies of occupation I have outlined in this dissertation. Thus, finding ways to account for Indigenous wellbeing requires a much broader critical engagement with the ethical demands of health justice and Indigenous futurity.

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