
Bureaucratic Vulnerability

Possession, Sovereignty, and Relationality in Brazilian Research Regulation

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Introduction

Geneticist Fabrício Rodrigues dos Santos rushed through his words as he told me about his experience of fieldwork in A'uwẽ territory. From his office at the Universidade Federal de Minas Gerais, he wove an entrancing story of his time in Aldeia Etênhiritipá. His eyes shone as he recounted a hunting trip, stargazing, and a movie night; I was fascinated. Rather than focusing on days filled with collecting genealogical data and genetic samples, Santos's narrative centered on what he called "the most interesting part . . . the anthropological experience."¹ Santos's tale did not fit with my preconceptions of genetic sampling for the Genographic Project.

I had been introduced to Santos by one of his colleagues, Maria Cátira Bortolini, a fellow scholar of human genetics who was hosting me for a period of research in her department at the Universidade Federal do Rio Grande do Sul in Porto Alegre. As Bortolini followed my growing interest in the history of genetics research in A'uwẽ (Xavante) communities as well as its ethical oversight, she suggested I interview Santos.

The South American branch of the Genographic Project, a global program sponsored by National Geographic and IBM, had run into a complex and slow

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¹ Fabrício Rodrigues dos Santos, interview with Rosanna Dent, Belo Horizonte, March 6, 2014.

process of regulatory approval in Brazil. As a transnational, corporately sponsored program that focused on genetic sampling of Indigenous groups across the continent, the project was subjected to multiple additional levels of ethical oversight. As the coordinator for the program, Santos navigated the four-year process to obtain official permissions to conduct the embattled research project. However, while he was happy to tell me about the difficulties of navigating regulatory bureaucracies, it was talking about his time in the field that made his eyes shine. As I listened to him explain his fieldwork, it seemed to me that there was another process of research regulation underway as well – though perhaps not explicitly articulated. The A'uwẽ *aldeia* – village or autonomous political community – that hosted him and his team, Etênhiritipá, was also working to instill a framework for their interactions, a relational and affective basis for knowledge making.

At the time of my interview with Santos, I was conducting my own participant-observation through oral history and archival research in labs and academic departments around Brazil. It would be a year before my fieldwork would extend to overlap explicitly with Santos's with my first visit to Terra Indígena (T.I., Indigenous Land) Pimentel Barbosa, the A'uwẽ territory where the Genographic team conducted their research. The aldeias of this territory have been hosting researchers since shortly after they established diplomatic relations with the Brazilian government in 1946. The first anthropologist arrived in the aldeia of Wedezé in 1958. Since then, the community – and subsequently communities as the population grew and aldeias divided – of Terras Indígenas Pimentel Barbosa and Wedezé have hosted dozens of researchers. Geneticists and biomedical researchers James V. Neel, Francisco Salzano, and colleagues followed the first anthropologist in 1962. Subsequently, scientists from almost every discipline of the human sciences have visited, from social and cultural anthropology, linguistics, and education, to public health, biomedicine, and human genetics, creating an extensive published literature of *warazú* (non-A'uwẽ) understandings of A'uwẽ life, language, health, biological differentiation, and history.

These communities are a classic example of “overstudied Others,” as described by Eve Tuck and K. Wayne Yang.² However, T.I. Pimentel Barbosa has become a hub of scholarly attention not only because of the wealth of past studies and data sets, but also due to the interest of aldeia residents in cultivating relationships with researchers. While A'uwẽ in the 1950s and 1960s had little context to understand the actions of the scientists who arrived to study them, with time and experience they developed their own expertise in research. In the context of ongoing Brazilian colonialism in

² Eve Tuck and K. Wayne Yang, “R-Words: Refusing Research,” in *Humanizing Research: Decolonizing Qualitative Inquiry with Youth and Communities*, eds. Django Paris and Maisha T. Winn (Thousand Oakes, CA: SAGE, 2014), 223–248, 223

Indigenous territories, residents and especially certain leaders came to engage scholars for their own reasons. They developed strategies to guide and direct researchers.

This chapter explores the two different systems of research oversight that applied to Santos and the Genographic Project. It does so by situating these systems within the broader relational nature of field sites and fieldwork that has shaped the experience of warazú researchers and A'uwẽ participants. As the other chapters in this book have shown, affective relationality shapes knowledge in the human sciences across the scales of the transnational and national. Both the assertion and recognition of expertise are bound up with appeals to affect: about the racial construction of national character, or the politics of consumption within the international order. Here I combine attention to the bureaucratic interface of the transnational and national with the very personal level at which Indigenous actors modulate affect to attend to pressures of Brazilian state administration. Attention to the “complex moral sensibilities and structures of feeling” of research participants does much to illuminate the limitations of abstracted ethics and formalized medical research regulation, as Warwick Anderson has shown in his explorations of the relationships between Fore communities afflicted by the neural disease kuru and the scientists who sought to study and sample them.³

In this case, sets of normative considerations stretch and vary across fields of scholarship including genetics, public health, and anthropology. Members of the Genographic Project encountered both the formalized bureaucracy of ethics regulation of the Brazilian state, and the systems of relational ethics that A'uwẽ leaders and community members in T.I. Pimentel Barbosa have developed to try to instill or compel responsible research from warazú like myself who seek knowledge in A'uwẽ territory. By relational ethics, I refer to principles that some A'uwẽ articulate, both explicitly in conversation and through their demands and actions. These principles hold that researchers should center relationships and the responsibilities that accompany these relationships when engaging or seeking to engage with members of the aldeias.

In exploring these two systems, I focus primarily on genetics-based research that began in 1962 and continues to the present. I consider other forms of scholarship and research methodology in my discussion of what I see as A'uwẽ regulation because these interactions have profoundly influenced aldeia residents' experiences of knowledge production. This is particularly true of the work of anthropologists who lived in A'uwẽ territory for extended periods, as well as public health scholarship that has evolved into repeated, ongoing programs of study.

³ Warwick Anderson, *The Collectors of Lost Souls: Turning Kuru Scientists into Whitemen* (Baltimore: Johns Hopkins University Press, 2008), 7.

My focus here is on genetics research because it brings into relief two facets of what I call bureaucratic vulnerability. First, this history demonstrates the role of the state and the regulatory system in adjudicating research, as well as researchers' attempts to continue their inquiries even when that oversight could constrain current research. I argue that the way some geneticists have interpreted state regulatory systems regarding biosamples creates additional risks for Indigenous people under study. At the same time, Indigenous groups are placed in a bureaucratic double bind, where non-Indigenous experts are called on to justify and validate their claims in the eyes of the state. For all the flaws inherent in its conceptualization, the Genographic Project allows us to see ways A'uwẽ have responded to the dual and interrelated challenges of recognition under a colonial state and the management of outside researchers. This is the second axis of bureaucratic vulnerability: The implicit requirement to be documented in certain ways pushes community members to engage and cultivate relationality with researchers.⁴

Here I explore the possessive logics of both the systems of the state and the actions of researchers as Indigenous heritage, genes, lands, or knowledge come to be the focus of study and documentation. In studying and writing about these systems, which also shape my own research engagements both with the Brazilian state and with A'uwẽ community members, I do not aim to place blame or exonerate – I too am implicated and embroiled in Brazilian state regulation and relations-building in Pimentel Barbosa.⁵ Rather, I hope history and the work of the historian have a role to play to make sense of the contexts, unintended consequences, and possible alternate futures that emerge from seriously considering how A'uwẽ actors build affective and political connections with the scholars who visit them.

I begin by exploring the concept of bureaucratic vulnerability and how regulatory structures and their avoidance are conditioned by the possessive logics of Brazilian colonialism. From the protectionist regulation of the Brazilian state, I turn to examine a set of relationship-based practices that A'uwẽ interlocutors have developed over repeated interaction and years of collaboration with a group of anthropologists and public health researchers. Finally, I turn to how and why

⁴ Margaret Bruchac highlights parallel logics in *Savage Kin: Indigenous Informants and American Anthropologists* (Tucson: University of Arizona Press, 2018), 180.

⁵ My own relations are primarily constituted through Aldeia Pimentel Barbosa, where I have spent approximately four months over five trips since 2015. As Warren describes in Chapter 3, this project was not initially conceptualized through Indigenous Studies methodologies, and I was initially hesitant to engage A'uwẽ for fear of replicating research harms. However, since working directly with Aldeia Pimentel Barbosa, my work has changed and I have also begun collaborations with Aldeias Etênhiritipá and Paraíso. While I have not explicitly discussed this paper in the aldeias, I have talked with them about many episodes herein, including ongoing use of old biological samples, and community experiences of Genographic research.

A'uwẽ aldeia members embraced the Genographic Project, even as other similarly well-informed groups declined to participate. Contextualized in prior experience with scholars, and the mandates of bureaucratic thinking that constrain Indigenous rights to land, health, and education in Brazil, the relational work that aldeias of T.I. Pimentel Barbosa performed looks different.

Bureaucratic Vulnerability

In discussions and formal interviews between 2012 and 2014, I quickly came to see that the regulatory hurdles that the Genographic Project faced loomed large in the imagination of other geneticists with interest in studying Indigenous genes. The layers of bureaucracy and the approach of the regulatory body, the Comissão Nacional de Ética em Pesquisa (CONEP, the National Commission of Ethics in Research) proved such a perceived barrier that various labs stopped proposing new sampling. Instead, they used work-arounds to continue their research, whether on samples from collaborators in other countries where official approvals are easier to attain or by using stored samples collected under prior ethical and regulatory regimes.

This dynamic drew my attention to questions of vulnerability: How are Indigenous people positioned as uniquely vulnerable research subjects within Brazilian legislative frameworks? How do regulatory bureaucracies and the people that interact with them simultaneously construct and respond to perceived vulnerability, while also creating new kinds of risk for Indigenous groups? And how are broader bureaucracies of recognition related to and dependent on expert knowledge production? In this section, I explore the concepts of vulnerability and bureaucracy as they relate to what Aileen Moreton-Robinson and Maile Arvin have each referred to as a *logic of possession* over Indigenous peoples.⁶ This logic is practised by both the Brazilian state in its oversight of researchers and the extension of federal recognition of Indigenous lands, and by non-Indigenous scholars in human genetics research that aims to tell a universal history of humankind. Those who, in Ailton Krenak's words, are not full members of the *clube da humanidade* (the club of humanity) can be the subjects of research to illuminate a history of humanity that scientists hold to be universal.⁷

The logic of possession is enacted through discourses of both biology and national history. It provides a counterpart to more common discussions of

⁶ Aileen Moreton-Robinson, *The White Possessive: Property, Power, and Indigenous Sovereignty* (Minneapolis: University of Minnesota Press, 2015); Maile Arvin, *Possessing Polynesians: The Science of Settler Colonial Whiteness in Hawai'i and Oceania* (Durham, NC: Duke University Press, 2019).

⁷ Ailton Krenak, "Tragédia Yanomami mostra que clube da humanidade não é para todos," interview with Eduardo Sombini, *Ilustradíssima Conversa*, January 28, 2023.

the settler colonial logic of elimination, as articulated by Patrick Wolfe.⁸ Arvin highlights how scientific classification of Native Hawaiian people as “almost white” has served to naturalize the presence of white settlers in Polynesia. She argues, possession expresses “more precisely the permanent partial state of the Indigenous subject being inhabited (being known and produced) by a settler society.”⁹ Jenny Reardon and Kim TallBear have extended a similar analysis to the politics and practices of genetic research on Indigenous peoples including the Genographic Project. They highlight how (usually) white scientists make claims on the genes of Native peoples in service of Western creation stories that do not serve and may even undermine Indigenous epistemologies.¹⁰ In the Brazilian context, Tracy Devine Guzmán has discussed how the paternalistic logics of expansionism were articulated through an “anti-imperial imperialism.” Framed in terms of their opposition to foreign interests in Amazonia or (other) Indigenous territories, Brazilian state actors constructed Native people as “our Indians in our America,” justifying and extending their own ongoing internal colonialism.¹¹

The regulation and production of expert knowledge is central to enacting logics of possession. As Joanne Barker has so convincingly written, mandates for documentation to “prove” Indigeneity create conflicted and conflictual relationships between Native peoples and scholarship produced by outsiders.¹² When the object of study is an Indigenous group, Aileen Moreton-Robinson writes, the product is cultural difference, which serves nation-states by producing “manageable forms of difference.”¹³ Indigenous peoples must demonstrate their claims in specific ways to be recognizable and to access even the limited rights afforded to them.¹⁴

In twentieth- and twenty-first-century Brazil, difference has most often been managed through bureaucracy. At the highest level, state-led arbitration of knowledge provides the foundation for the twin processes of defining

⁸ Patrick Wolfe, “Settler Colonialism and the Elimination of the Native,” *Journal of Genocide Research* 8, no. 4 (2006): 387–409, <https://doi.org/10.1080/14623520601056240>.

⁹ Arvin, *Possessing Polynesians*, 16.

¹⁰ Jenny Reardon and Kim TallBear, “‘Your DNA Is Our History’: Genomics, Anthropology, and the Construction of Whiteness as Property,” *Current Anthropology* 53, no. S5 (2012): S233–S245.

¹¹ Tracy Devine Guzmán, *Native and National in Brazil: Indigeneity after Independence* (Chapel Hill: University of North Carolina Press, 2013), 105–130.

¹² Joanne Barker, “The Specters of Recognition,” in *Formations of United States Colonialism*, ed. Alyosha Goldstein (Durham, NC: Duke University Press, 2014), 33–56.

¹³ Moreton-Robinson, *White Possessive*, xvii.

¹⁴ Elizabeth A. Povinelli, *The Cunning of Recognition: Indigenous Alterities and the Making of Australian Multiculturalism* (Durham, NC: Duke University Press, 2002), 12 and 173–185.

and racializing *indigenas* and justifying the expropriation of Indigenous land.¹⁵ The introduction of a system of oversight for explorers, scientists, and artists wishing to visit Indigenous lands in the 1930s served as a mechanism by which the Brazilian state could claim Indigenous peoples and cultures as national patrimony, while also asserting the role of protector. At the same time, the state reasserts its sovereignty through the regulation of researchers. I describe this process in more detail in the next section. However, for the purposes of understanding the second axis of bureaucratic vulnerability, I highlight here that some geneticists respond to the seemingly ever-increasing bureaucracy of regulation by using less-regulated strategies to continue to research Indigenous groups, but without consultation or ongoing consent. Citing bureaucratic barriers, they have continued to use historical biosamples, or tissues or DNA from Indigenous groups beyond Brazil's borders to research without engaging in fieldwork or the direct accountability of relationship-building.

In framing these dynamics as “bureaucratic vulnerability,” I am interested in the creation of risk and harm through state administration.¹⁶ The concept of vulnerability in bioethical discourse has been problematized for its insinuations of weakness, a focus on participants at the expense of attention to structures of research inquiry, and its limitation in addressing the specificity of particular groups' experiences.¹⁷ Here I seek to move beyond classifying Indigenous people as “vulnerable,” rejecting damage narratives,¹⁸ to focus instead on how the concept of vulnerability and the bureaucracies built around it create risks for A'uwẽ communities. The term bureaucratic vulnerability intends to draw readers' attention to the structures of research inquiry and state knowledge production that marginalize A'uwẽ knowers and knowledge. This focus on bureaucratic structures also helps me grapple with what I see as A'uwẽ desire to engage with researchers as well as community members' refusal to talk about or dwell on negative perceptions of researchers or damage enacted by researchers.¹⁹

¹⁵ On the co-construction of “*indigena*,” and “Spaniard” in the sixteenth century and the corresponding radical change in governmentality through bureaucratization, see Irene Marsha Silverblatt, *Modern Inquisitions: Peru and the Colonial Origins of the Civilized World* (Durham, NC: Duke University Press, 2004).

¹⁶ Anthropologist Rosana Castro highlights an interesting parallel in her analysis of Brazilian state prioritization of pharmaceutical trails that renders racialized Black and Brown Brazilians *biodisponível* (bioavailable) for clinical research in a context of scarcity of care. See Castro, *Economias políticas da doença e da saúde: uma etnografia da experimentação farmacêutica* (São Paulo: Hucitec Editora, 2020).

¹⁷ Alexis K. Walker and Elizabeth L. Fox, “Bioethics, ‘Vulnerability’ and Marginalization,” *AMA Journal of Ethics* 20, no. 10 (2018): E941–E947.

¹⁸ Tuck and Yang, “R-words,” 223.

¹⁹ Tuck and Yang draw on Audra Simpson's work to emphasize that “refusals are not subtractive, but theoretically generative.” “R-words,” 223. See Audra Simpson, *Mohawk*

Settler Knowledge and Bureaucracies of Possession and Recognition

The history of Brazilian state regulation of research in Indigenous territory is tightly bound up with possessive logics, as well as a nationalist concern about the presence of foreign researchers. More recent classifications of Native peoples as vulnerable cannot be divorced from this and a broader history of Brazilian *tutela* or *tutelage*. *Tutela* and its proponents – identifying Indigenous people as child-like and in need of protection, education, and moral uplift – justified post-Independence colonization and provided terms in which they claimed moral authority.²⁰ As Antonio Carlos de Souza Lima has argued, the development of the administration of Indigenous peoples and lands in the early twentieth century was part of a “massive siege of peace,” which also helped to form the Brazilian state.²¹

Official legislation and the institutionalization of research oversight was not implemented until 1933 under the dictatorship of Getúlio Vargas with the formation of the Conselho de Fiscalização das Expedições Artísticas e Científicas (Conselho, Council for Control of Artistic and Scientific Expeditions).²² The proposal’s architects promoted the project as one aimed at those foreign expeditions that did not follow “established norms and ethics,” by which they meant those that failed to support technical cooperation and knowledge sharing.²³

The new *Conselho* was fundamentally concerned with protecting what its members and legislators saw as patrimony, which included mineral, botanical, and ethnological specimens. Once established, it worked with the Ministry of Foreign Relations and the Serviço de Proteção aos Índios (SPI, Indian Protective Service) to ensure, among other things, that an equal half of all specimens and materials collected were deposited with the Brazilian government before export permits would be granted.²⁴ The government also required copies of all resulting reports and publications, contributing – at least in theory – to the legibility of Indigenous groups to the state. As Luís Grupioni explains, “. . . the Indians interested the Council as a testimony, as an

Interruptus: Political Life across the Borders of Settler States (Durham, NC: Duke University Press, 2014), 95–114.

²⁰ Antonio Carlos de Souza Lima, *Um grande cerco de paz: Poder tutelar, indianidade e formação do estado no Brasil* (Petrópolis: Vozes, 1995); Seth Garfield, *Indigenous Struggle at the Heart of Brazil: State Policy, Frontier Expansion, and the Xavante Indians, 1937–1988* (Durham, NC: Duke University Press, 2001).

²¹ Lima, *Um grande cerco de paz*.

²² Luís Donisete Benzi Grupioni, *Coleções e expedições vigiadas: Os etnólogos no Conselho de Fiscalização das Expedições Artísticas e Científicas no Brasil* (São Paulo: Hucitec Editora, 1998), 50–53.

²³ *Ibid.*, 51–52.

²⁴ *Ibid.*

inheritance, transformed into patrimony that needed to be preserved; it is in the action of collecting artifacts and depositing them in museums that this organ occupies a place in the indigenist field.²⁵ In the case of the Conselho, nationalism and a paternalistic and assimilationist mandate served as moral justification for regulating researcher access to Indigenous groups in Brazil.

During the military dictatorship (1964–1985), a variety of institutions were charged with collectively controlling scientific expeditions into Indigenous territories.²⁶ Bureaucratic demands grew, but the framing was similar: preventing scientists, particularly foreign ones, from visiting militarily strategic areas or absconding with valuable patrimony was enmeshed with protecting Indigenous groups from the same visitors.

The exercise of Brazilian sovereignty over Indigenous peoples was also intimately dependent on the knowledge created by researchers, particularly in relation to the identification and demarcation of Indigenous lands. Although there were strong fluctuations over the course of the dictatorship, FUNAI administrators were sometimes supportive of research, conceptualizing it as a resource for the *indigenista* organization and government more broadly to understand – and by implication govern – Indigenous groups. For example, as president of FUNAI in 1975, the unusually progressive General Ismarth de Araújo Oliveira supported the view that anthropologists should be required to provide information in the form of field reports and final publications and that, “the organization of this documentation will be one of the greatest weapons that FUNAI has for the defense of Indigenous land.”²⁷ FUNAI even prioritized research in certain areas where the government lacked knowledge about Indigenous inhabitants.

Federal recognition of Indigenous lands – demarcation – has been an essential factor in the protection of Indigenous lives and lands.²⁸ However, it also partially remediated the problem created by the state’s programs of westward expansionism. The military dictatorship promoted demarcation because it facilitated the regularization of legal claims by ranchers and new

²⁵ *Ibid.*, 269.

²⁶ They included the Conselho and the SPI until both institutions were dissolved, in 1969 and 1967, respectively. The Fundação Nacional do Índio (FUNAI, National Indian Foundation), the Conselho Nacional de Pesquisa (CNPq, National Research Council), and the Conselho Nacional de Segurança (National Security Council) took over oversight of scientific expeditions.

²⁷ Conselho Indigenista, “Sessão 1 do Conselho Indigenista,” AVESON 222 F lado B, compact disk, SEDOC-MI/FUNAI.

²⁸ As Garfield points out, it is important to recognize that government actors have played essential roles in preventing murder and dispossession, even as broader policies created conditions for these confrontations. See Garfield, *Indigenous Struggle*, 51.

agribusiness entrepreneurs to surrounding land they had occupied at the invitation of the government.²⁹

The bureaucracy changed again in 1988 with the ratification of the current Constitution, and in 1996 with the National Health Council's Resolution 196/96. This resolution added to the existing system a mandatory review by an institutional ethics committee and CONEP that would oversee certain kinds of research considered to be of higher risk.³⁰ This legislation detailed a series of "special thematic areas" designated for higher scrutiny, most of which focused on biological concerns such as research involving human genetics, or dealing with populations seen as biologically vulnerable, such as pregnant women or children. However, the legislation also identified any research in Indigenous territory as a special thematic area. The law defines Indigenous peoples – the only category determined by sociological parameters – as inherently vulnerable.³¹ The implementation of the added layers of review meant that a single protocol dealing with research in Indigenous territory had to pass through at least four processes of review before FUNAI forwarded it to the community in question for consultation. The result was an extensive, slow, and complex approval process.

State reliance on knowledge from the human sciences thrusts Indigenous groups into a bureaucratic double bind. This is an administrative version of the dilemma highlighted by Guzmán in her examination of Indigenous leaders' and activists' political action in Brazil. Guzmán describes this double bind as "knowing that any intervention they might undertake in that system – already against great odds and at great personal cost – unavoidably reinscribes, to some degree, the erasure, exclusion, and delegitimization that has characterized the indigenous–state relationship since its inception."³² Faced with demands to be legible in certain ways, many Indigenous groups cultivate relationships with anthropologists or other scholars who they hope will become allies in moments of bureaucratic need.

Adopted Warazú and Regulatory Affect

Aldeia Etênhiritipá's reception of Fabrício Rodrigues dos Santos and the Genographic Project was predicated on years of experience of interacting with

²⁹ Ibid., 140–142.

³⁰ Conselho Nacional de Saúde, "Resolução nº 196, de 10 de outubro de 1996," February 10, 2017, http://bvsms.saude.gov.br/bvs/saudelegis/cns/1996/res0196_10_10_1996.html.

³¹ Ricardo Ventura Santos, "Indigenous Peoples, Bioanthropological Research, and Ethics in Brazil: Issues in Participation and Consent," in *The Nature of Difference: Science, Society and Human Biology*, eds. George Ellison and Alan H. Goodman (London: Taylor & Francis Books, 2006), 191.

³² Guzmán, *Native and National in Brazil*, 166.

researchers. Here, before examining how the Genographic researchers recounted their enrollment in the next section, I trace another case of scholars who developed deep connections in Terra Indígena Pimentel Barbosa. Their acceptance and training by the community has taken place over more than thirty years. As anthropologists and public health researchers Carlos Coimbra and Ricardo Ventura Santos have visited, researched, and collaborated in T.I. Pimentel Barbosa, over time A'uwẽ community members shaped their approaches through the construction of an affective field.

I describe this as an “affective field,” to emphasize the dynamic play of experience (being affected) and action (affecting change).³³ Rather than referring to the cultivation of specific emotions such as happiness, nostalgia, or pity, the affective field emphasizes the ever-evolving qualities of human relationships and relationships with place. This space of being affected and affecting others overlaps and works to constitute the field. It compels researchers to center relations; research becomes, fundamentally, a question of “self-in-relation.”³⁴ Whether this involves cultivating field experiences such as stargazing, or a sense of inclusion in ceremony and community events, or a deeper sense of obligation through the articulation of new kin relations and their invocation in the face of community challenges, a complex emotional landscape permeates the researchers’ “fields.” Following the story of Santos and Coimbra’s research allows us to see how aldeia residents developed their own regulatory system that is affectively based.³⁵ Their request that Coimbra and Ventura Santos conduct a delimitation study for the demarcation of an adjacent A'uwẽ territory in the mid-2000s also underscores how taking a relational approach to researchers is a precarious but important technique in the face of bureaucratic imperatives of documentation.

In 1990, Coimbra and Santos were introduced in Aldeia Pimentel Barbosa by Nancy Flowers, an anthropologist who had spent fourteen months there during a critical period of the 1970s when residents of T.I. Pimentel Barbosa faced particularly acute challenges to their land rights. Community members indicated that the first step for the researchers upon arriving was to present themselves and their plans at the *warã*, the men’s council meeting, a twice daily gathering of men who have completed spiritual initiation that serves as a

³³ Michael Hardt, “Forward: What Affects Are Good For,” in *The Affective Turn: Theorizing the Social*, eds. Jean Halley and Patricia Ticineto Clough (Durham, NC: Duke University Press, 2007), ix.

³⁴ Fyre Jean Graveline as quoted in Margaret Kovach, *Indigenous Methodologies: Characteristics, Conversations and Contexts* (Toronto: University of Toronto Press, 2009), 14.

³⁵ Of particular relevance is Anderson’s excavation of how Fore cultivated connections, kinship, and networks of gift exchange and indebtedness with biomedical and social scientists that arrived to study kuru: Anderson, *Collectors of Lost Souls*.

space to discuss political happenings of the community. Santos explained this saying, “If we arrived one day, the next day at five-thirty in the morning we were there in the warã, introducing ourselves, recounting our news, with them wanting to know what we wanted to do there, what our plans were.”³⁶ Having already hosted researchers dozens of times, the warã had come to function as part of the A’uwẽ system of oversight. Scholars were expected to publicly present their ideas and plans for their work, and then be present for what sometimes were long, formal discussions in the A’uwẽ language. The warã became a space of accountability, where at the end of a period of investigation, scholars are called back to update the community on their activities and expectations moving forward.

As they undertook their first years of research in Pimentel Barbosa, recent PhDs Coimbra and Santos were busy settling into new positions at the Escola Nacional de Saúde Pública (ENSP, National School of Public Health) in Rio de Janeiro. There they built a research program in Indigenous health with particular attention to the social determinants of health, and T.I. Pimentel Barbosa came to play a central role in their work.³⁷ Part of what made ongoing visits to the aldeia possible was the open-ended quality of their relationships.

Coimbra and Santos were welcomed and supervised by a variety of Elders, leaders, and others in the aldeia. Over time, “our perspective really changed,” Coimbra explained to me. “[At the beginning,] we went into the A’uwẽ community without knowing anything, just with the Neel and Salzano references [from a 1962 study] in hand to repeat that research . . . In contrast, today the exchange is really intense.”³⁸ Coimbra and Santos’ approach was also evolving in concert with changing notions about the practice of public health in Brazil. The early 1990s was a time of widespread changes in the Brazilian public health system in the wake of re-democratization, with discourses about health rights and equity centered by many public health researchers and practitioners.³⁹

In 2014, Tsuptó, a young leader who officially represents Aldeia Pimentel Barbosa to FUNAI, described a shift in how researchers and community members have engaged over time. Thinking back to the earliest ethnographic publications, which documented his community and other A’uwẽ aldeias, he said, “There was a time when there was disrespect. Without the knowledge of the Indigenous population, some works were published, which I see today as a

³⁶ Ricardo Ventura Santos, interview with Rosanna Dent, Rio de Janeiro, April 15, 2014.

³⁷ Carlos E. A. Coimbra Jr., interview with Rosanna Dent, Rio de Janeiro, March 19, 2014.

³⁸ Ibid.

³⁹ Ana Lúcia de Moura Pontes, Felipe Rangel de Souza Machado, and Ricardo Ventura Santos, *Políticas antes da política de saúde indígena* (Rio de Janeiro: Editora Fiocruz, 2021).

lack of respect. But now, today we are talking. This is respect. It is through dialogue that the work is done, and that is important.”⁴⁰

This dialogue increasingly shapes the research projects that the Pimentel Barbosa Elders accept. In the case of Santos and Coimbra, as diabetes and other metabolic issues became increasingly prevalent, key interlocutors within the aldeia started insisting that the public health researchers turn their attention to chronic health problems. “Really, to be honest,” Coimbra recounted,

At first, when they started to talk to me about diabetes, it took me about two years to come to terms with the fact that I could not escape, because I had always strongly focused on the ecology of infectious disease. I knew something about metabolic disorders, but I did not know the field intimately . . . It took me a while to get up the nerve, but then we did it.⁴¹

By the 2010s, research on metabolic issues was a major aspect of the work of the ENSP research group. It was in the context of these sustained interactions that leaders in Pimentel Barbosa were able to advocate for a new direction in research that would address issues they prioritized.

Tsuptó emphasized that, yes, while he thought the research topics were important, the process of research also created enduring connections: “The work got deeper and won our confidence. And the relationship of friendship with Carlos and Ricardo . . . it’s not just through the work or research, but through our relationship of friendship as people.”⁴²

Another key strategy that community members have applied to warazú researchers is the incorporation into the A’uwē affective field through adoption. Increasingly, over time, Elders in Pimentel Barbosa have adopted scholars who come to research. “Adoption” here is a process of claiming a researcher, by which an Elder (or sometimes more than one) asserts a relationship of kinship by publicly announcing their chosen relationship to the researcher. Whether or not a researcher is formally adopted depends on a variety of factors, from age to whether we stay in the aldeia or at the nearby government post, to the length of our visits. There is no formula.

What is clear is that by asserting kinship, A’uwē Elders call on researchers to behave according to social norms of family; they invoke these terms to emphasize their moral authority.⁴³ As researchers, we understand and attempt

⁴⁰ Tsuptó Buprewên Wa’iri Xavante, Barbosa Sidówi Wai’azase Xavante, Luiz Hipru Xavante, and Agostino Saseru Xavante, interview with Rosanna Dent, Água Boa, MT, June 4, 2014. Tsuptó referred – I think – not only to the abstracted relationship between aldeia and researcher, but also as an invitation to me to take a relational approach.

⁴¹ Coimbra, interview.

⁴² Tsuptó Buprewên Wa’iri Xavante, interview with Rosanna Dent, Canarana, MT, July, 10, 2019.

⁴³ Jeffrey Kaufmann and Annie Philippe Rabodoarimiadana make this point also for the case of Malagasy reception of fieldworkers in “Making Kin of Historians and

to meet these expectations to varying levels. As others have discussed, these forms of chosen kinship function in multiple ways. They help to bridge boundaries across power differentials, and in Cristian Alvarado Leyton's words, institutionalize "a moral imperative of loyalty and solidarity . . . [through] affective relatedness, promising in turn an enduring relationship."⁴⁴ While some scholars express skepticism about the authenticity of anthropologists' or other researchers' claims to adoption,⁴⁵ I understand A'uwẽ use of kin terms as a pragmatic invocation of relationality and expression of affective connection that helps clarify understandings of what constitutes ethical or moral work according to A'uwẽ expectations.

Santos and Coimbra were not initially incorporated into specific families, but after many years of collaboration, there was consensus among community members that they belonged to one moiety, *poreza'õno*, rather than *õwawe*, the other.⁴⁶ Their place in the social system of the aldeia was based not on the facts of their research, but on the facts of their persons. "Researcher is what you do. Poreza'õno is who you are," Tsuptó explained to me as I asked how we are separated into moieties. Likewise speaking of Coimbra, Tsuptó explained, "He would come independent of the research . . . I would say, 'we need help. Carlos . . . this thing is happening. Can you do this work?' 'No, Tsuptó. I'll do it.' And through that, Barbosa – as an Elder – he spoke: 'Carlos is my brother . . . Everyone will respect him the way they respect me' . . . So he decided. He spoke this to the warã."⁴⁷ Tsuptó's uncle Barbosa Sidówi Wai'azase Xavante claimed Carlos as family and extended his protection to the researcher.

Other researchers, especially those who have arrived at a younger age and lived more time in the aldeia, have been adopted and named, claimed by an A'uwẽ Elder as their child. Since the year 2000 at least seven researchers associated with the ENSP team – including myself – have been publicly adopted. In discussion, Elders Marilda, Solange, Angélica and Agostinho explained how this adoption works through the translation of Goiano, saying, "It is the person who arrives first, to encounter, greet, and love the person. So it is the one who arrived, greeted, and loved, and there they become family, they

Anthropologists: Fictive Kinship in Fieldwork Methodology," *History in Africa* 3 (2003): 179–194. On anthropologists as kin, see also Bruchac, *Savage Kin*.

⁴⁴ Cristian Alvarado Leyton, "Fictive Kinship," in *Encyclopedia of Human Relationships*, eds. Harry Reis and Susan Sprecher (Thousand Oaks, CA: SAGE, 2009), <https://doi.org/10.4135/9781412958479>.

⁴⁵ Kaufmann and Rabodoarimadana detail the skepticism of Clifford Geertz, for example, but assess that taking seriously fictive kinship helps show the contingency, movement, and pragmatic-dynamic quality of research relationships. See "Making Kin," 192–193.

⁴⁶ A'uwẽ belong to one or the other moiety, passed to them from their father, and may only marry someone from the other.

⁴⁷ Tsuptó, interview.

begin to transform into family . . . For example, Sereburã arrived, greeted, and liked you, and already established [*colocou*] to call you daughter. So there you already are transformed.”⁴⁸ As Elders extend this formal familial belonging, they inculcate obligation and esteem. Adoption implies a great deal of work, as adoptive family members often take an outsized role in caring for us warazú researchers, from educating us about how to behave and how to understand things that are unfamiliar to preparing materials for our participation in community ceremonial life.

This adoption draws researchers into an affective field, where a researcher’s decisions and actions take place within a profoundly relational system. These actions to adopt, incorporate, teach, and oblige researchers are an A’uwẽ praxis that in my interpretation works to destabilize the researcher–subject binary. I see researcher and A’uwẽ creation of the affective field as working toward Kim TallBear’s eloquent urging that “we must soften that boundary erected long ago between those who know versus those from whom the raw materials of knowledge production are extracted.”⁴⁹

Interest in incorporating researchers, however, is also a response to the failings and mandates of the state. Tsuptó recounted the work of one of Ventura Santos and Coimbra’s students, Rui Arrantes, on oral hygiene: “now children, school-aged children, they use toothbrushes . . . with their [ENSP’s] work it awoke [us]. We had to do something, we had to take action.”⁵⁰ Tsuptó emphasized that the researchers arrived with such a high level of training and technical competence that they were able to implement good programs that government employees failed to realize for their lack of relationships, dedication, and training.⁵¹

The ENSP researchers also responded to calls from the communities of T.I. Pimentel Barbosa to support their efforts to reclaim a large portion of their territory by conducting a delimitation study for submission to FUNAI and the judicial system. “As one of the leaders,” Tsuptó recounted, “I needed help. For this delimitation study, a field study, I needed an anthropologist, I needed an environmentalist, I think a biologist . . . I did not want FUNAI to choose someone. I did not trust them.”⁵² After consulting with the other aldeias of T.I. Pimentel Barbosa, Tsuptó invited Coimbra, Ventura Santos, and another member of their team, anthropologist James Welch, to conduct the study:

⁴⁸ Angélica Wautomouptabio Xavante, Agostinho Seresu Xavante, Marilda Peuzano Xavante and Solange Penepe Xavante, interview with Rosanna Dent with translation by Goiano Tserema’a Xavante, Canarana, MT, July 3, 2019.

⁴⁹ Kim TallBear, “Standing with and Speaking as Faith: A Feminist-Indigenous Approach to Inquiry,” *Journal of Research Practice* 10, no. 2 (2014): 2.

⁵⁰ Tsuptó, interview.

⁵¹ *Ibid.*

⁵² *Ibid.*

“We went to Brasília, but at the time FUNAI had no funding to pay them . . . Beyond research, they were doing it because they are honest . . . A [different] anthropologist would not do this for free.”⁵³

“My first inclination was not to do it!” James Welch told me in a good-natured tone, “I thought it would be a huge amount of time . . .” he paused, “which it was.”⁵⁴ Coimbra told me, “We could not say no, of course, so we did it.”⁵⁵ Their collective expertise made them ideal for the project, Welch explained: “We decided together that it was important and it was the right thing and we probably had the best data to do it. We were probably the people that could produce a high-quality report.”⁵⁶ In 2008, Santos, Coimbra, and Welch joined a group of FUNAI employees to complete the Wedezé delimitation study in collaboration with the eleven aldeias of T.I. Pimentel Barbosa.

The formal process for legal demarcation of Indigenous Territory in Brazil begins with a multidisciplinary delimitation study, which combines ecological, archeological, and anthropological expertise. First, individuals with state-recognized epistemic authority, usually framed in terms of training in the relevant academic fields, are appointed to a working group. They produce a delimitation study for FUNAI. Once approved, this study then passes to the courts, where it faces often-extensive legal challenges from affected landowners. If the courts accept the study, the land becomes officially demarcated, with timelines for non-Indigenous occupants to vacate the area.⁵⁷ Indigenous groups do not have complete legal sovereignty over their lands, which remain under federal control.

For the Wedezé delimitation study, the anthropologists were able to draw on their extensive experience as well as historical source material: Field notes from researchers who had witnessed critical land struggles of the late 1970s helped corroborate A’uwê explanations of how they had lost Wedezé, and how important it continued to be for them. The earliest anthropological study was central in supporting community claims to the longevity of their connection to Wedezé. To complement the historical data, ENSP researchers drew on publications and data sets that they and their students had produced over the preceding two decades. Months of collaborative work produced further evidence including ethnobotanical surveys, oral histories from Elders, and technical surveying of cemeteries and ritual spaces. The study was comprehensive, and thoroughly backed up by years of respected research.⁵⁸

⁵³ Ibid.

⁵⁴ Welch, interview, March 27, 2014.

⁵⁵ Coimbra, interview.

⁵⁶ Welch, interview, March 27, 2014.

⁵⁷ FUNAI, “Entenda o processo de demarcação,” www.funai.gov.br/index.php/2014-02-07-13-24-53.

⁵⁸ Ricardo Ventura Santos et al., “Relatório circunstanciado de identificação e delimitação: Wedezé, população indígena Xavante” (Brasília: FUNAI, 2011).

The report led to the delimitation of 150,000 hectares of A'uwẽ land in 2011, at a time when few new Indigenous lands were being recognized. With FUNAI's acceptance of the report, the process moved to the courts. As of 2024 the proposal still faces legal challenges and a long and precarious road to official demarcation. However, the strong case that the researchers were able to build in cooperation with the aldeias was a major step toward demarcation. Interlocutors in the aldeias of Pimentel Barbosa recognized Coimbra, Santos, and Welch not only as friends of the aldeia, but as scholars whose authority would be recognized by the state. They differentiated the academics from other warazú as those most well prepared to present data on territorial claims to Wedezé. At the same time, Coimbra's sense that "we could not say no," underlines the obligation the researchers felt.⁵⁹ In part, this dedication was cultivated by the investment of A'uwẽ leaders and community members in the researchers, and by the aldeia's ongoing work to find common ground.

The bureaucratic processes of recognizing land – albeit small portions of prior territories – served and serve to inscribe Brazilian sovereignty over Native lands and reinscribe the power of the state to grant recognition. It is an area where administrators call on what they hold to be apolitical expert knowledge: Scientific empiricism is called upon "to manage the existence and claims" of groups like A'uwẽ communities. This mandate to be documented means that Indigenous groups have incentives to not only allow, but even to actively seek out relationships with scholars.

A'uwẽ community members shape knowledge production by engaging with the hopes, desires, and fears of the scholars who come to study them. This is not to say that there are never moments of refusal – questions are avoided, researchers are turned away from certain topics, projects are allowed to perish in inaction.⁶⁰ However, A'uwẽ actively work with scholars and so exercise agency, even (and perhaps especially) within a context of unequal access to power, resources, and knowledge. As Sherry Ortner points out, citing Laura Ahearn, the point "is not that domination and resistance are irrelevant, but that human emotions, and hence questions of agency, within relations of power and inequality are always complex and contradictory."⁶¹ In a system where academics are considered among the most reliable experts to consult on land demarcations or lobby for better education, health, or environmental

⁵⁹ Anthropologists in Brazil have frequently been called upon to provide different kinds of technical reports, for land delimitation or in criminal cases. For a critical overview of the conflicts this positioning produces, see João Pacheco de Oliveira, "The Anthropologist as Expert: Brazilian Ethnology between Indianism and Indigenism," in *Empires, Nations, and Natives: Anthropology and State-Making*, eds. Benoît de L'Estoile, Federico Neiburg, and Lygia Maria Sigaud (Durham NC: Duke University Press, 2005), 223–247.

⁶⁰ Simpson, *Mohawk Interruptus*.

⁶¹ Sherry B. Ortner, *Anthropology and Social Theory: Culture, Power, and the Acting Subject* (Durham NC: Duke University Press, 2006), 138.

management policies, A'uwẽ community members have chosen to draw researchers into an affective field in order to compel them to “stand with” rather than “give back” to the community.⁶²

The Xavante Genographic

As mentioned in the opening to this chapter, Genographic researchers Santos and Vieira spoke of their fieldwork in T.I. Pimentel Barbosa with relish. The researchers brought enthusiasm to discussing all their fieldwork, but in interviews they repeatedly set their time in Pimentel Barbosa apart. This suggests, I think, that their A'uwẽ hosts have been particularly adept at modulating the affective field of engagement. The two scientists articulated a sense of connection and belonging. This section examines researchers' personal reports of fieldwork in T.I. Pimentel Barbosa to explain the affective experience of research and explore the investment of time and effort that aldeia residents dedicated to the visiting researchers.

It is important to contextualize my interviews with the researchers within the fierce debates about genetic sampling of Indigenous groups generally and the Genographic Project specifically. Native activists and social scientists have objected to the premises of the project, citing the fraught Human Genome Diversity Project (HGDP) of the early 1990s, and a long history of scientific abuses of Indigenous subjects.⁶³ Some who were invited to participate articulated their own objections, including the Q'eros communities in Peru discussed by Adam Warren in Chapter 3 of this book.⁶⁴ Social scientists and historians have situated the Genographic Project within a longer trajectory of human biology, highlighting continuities with previous research agendas from the 1960s and 1990s.⁶⁵ In Brazil, journalists also picked up on the contested

⁶² TallBear, “Standing with and Speaking as Faith,” 2. On relationality in research, see also Kovach, *Indigenous Methodologies*; Shawn Wilson, *Research Is Ceremony: Indigenous Research Methods* (Winnipeg: Fernwood Publishing, 2009).

⁶³ See Indigenous Peoples Council on Biocolonialism, “Human Genetics Issues,” *Indigenous Peoples Council on Biocolonialism*, 2017, www.ipcb.org/issues/human_genetics/index.html; Jenny Reardon, *Race to the Finish* (Princeton: Princeton University Press, 2004), 2 and 205; TallBear, *Native American DNA: Tribal Belonging and the False Promise of Genetic Science* (Minneapolis: University of Minnesota Press, 2013), especially 149–176.

⁶⁴ Groups that chose not to participate cited concerns about control over the use of the samples. In Brazilian press coverage, the most cited group to reject participation in South America was the Hatun Q'eros community. See Warren, Chapter 3, and TallBear, *Native American DNA*, 189–196.

⁶⁵ On the genealogy of the Genographic in the context of the 1960s Human Adaptability Arm of the International Biological Program, the Human Genome Project and the Human Genome Diversity Project, and broader attempts to study, characterize, and so construct “Native American DNA,” see Joanna Radin, “Latent Life: Concepts and Practices of Human Tissue Preservation in the International Biological Program,”

nature of the project. They cast the initiative as a second *Projeto Vampiro*, citing the nickname of the HGDP. They drew comparisons to other controversial scientific endeavors, including the collection and storage of Yanomami blood, and the use of biosamples from Karitiana and Paiteir (Suruí) to create immortalized cell lines for research.⁶⁶ It was in large part due to these critiques that the regulatory process for the project was so belabored.

At different moments in their interactions with me, the Genographic researchers sought to rearticulate their defenses of the project through our conversations.⁶⁷ Santos's version of the A'uwê fieldwork also included exaggerations and reasons to read the interviews critically. However, Santos and Vieira's sentiments of excitement and longing were genuine, and many portions of their accounts match up with reports from other researchers, including (in some ways) my own, about how they were received and treated by aldeias in T.I. Pimentel Barbosa. While some Indigenous groups were wary of participating, or chose not to, the A'uwê aldeias that the Genographic Project visited embraced the project.

The scientists' initial connection with T.I. Pimentel Barbosa was through Jurandir Siridiwê Xavante, a leader from Aldeia Etênhiritipá. Jurandir had participated in an advisory board made up of leaders from five different Indigenous groups that consulted with the Genographic during the regulatory process.⁶⁸ The scientific team was composed of four men: geneticist Fabrício Rodrigues dos Santos as the principle investigator; biophysicist and postdoctoral researcher Pedro Paulo Vieira; Francisco Araújo, a graduate student in social anthropology at the Universidade Federal do Rio de Janeiro; and Peruvian Aymara graduate student José Sandoval.⁶⁹ As their primary interlocutor, Jurandir played a central role in the researchers' experience of their work in the *Terra Indígena*. He coordinated their stay, officially presenting them to the warã on their first night in Etênhiritipá so that aldeia Elders could consider the researchers' proposal.⁷⁰ Jurandir exercised his political influence

Social Studies of Science 43, no. 4 (2013): 484–508; Reardon, *Race to the Finish*; and TallBear, *Native American DNA* respectively.

⁶⁶ Marcelo Leite, "Projeto Genográfico e 'Projeto Vampiro,'" Folha de São Paulo, April 17, 2005; Maria Amparo Lasso, "Indígenas em guarda ante o projeto Genográfico," www.adital.com.br/site/noticia2.asp?lang=PT&cod=16334.

⁶⁷ For example, Santos emphasized the slow process of introducing the project to the A'uwê leadership, and with their approval, presenting the project to the community. Santos responded, implicitly, to critics who considered the time allotted for community consent processes in the project inadequate. See TallBear, *Native American DNA*, 190–191.

⁶⁸ Santos, interview. In 2008, the Genographic team held an initial meeting with the advisory group while the rounds of review continued at CONEP; Jurandir joined representatives from Kaingang, Tariana, Wapixana, and Pareci communities.

⁶⁹ Ibid.

⁷⁰ Vieira, interview.

in favor of the research project: He rallied aldeia residents to show up for the scientists' explanations of the project; he helped coordinate the support that the project would need at each turn.

Other aldeia residents also provided support. Two assumed the roles of guides and guards, helping the researchers with daily tasks, and protecting them and their equipment from overly curious children.⁷¹ These men took the researchers out to explore the *cerrado*, and taught them about A'uwẽ fire hunting practices. The researchers also worked with two leaders from each of the nine aldeias that participated in the study.

Santos' narrative of his research experience in Etênhiritipá included a wide variety of interactions that had little to do with the project's goals of collecting genealogical data and genetic samples:

It was really good because we interacted a lot. I brought a movie, I brought my computer. I have a film that tells the story of first contact of an uncontacted Indian group over in Rondônia . . . And they loved it . . . It was an all-night movie session, with that incredible starry sky, everyone sitting. The whole aldeia, you know? A lot of people.⁷²

Later in our interview, Santos continued to describe stargazing with a laser star pointer and an iPhone constellation application. "So it was a moment fully lived in every minute," Santos sighed.

But Santos and Pedro Paulo Vieira felt most deeply drawn in by what they understood as their inclusion in the aldeia. "And not only that," Santos told me, following up on his account of the movie night, "We participated in rituals with them. Not the rituals they put on for tourists, ones that they were really doing." Santos explained: "There were two rituals going on at the same time. One was [like] a baptism . . . In that ceremony I was baptized too. I'm öwawe," he said, referring to his incorporation into one of the A'uwẽ moieties.⁷³ Santos's story of his time in the aldeia betrayed the joy, excitement, and sense of engagement that set the A'uwẽ experience apart for the Genographic researcher. What Santos conveyed to me was not a series of emotional responses, but the researchers' movement through an affective field.

"The Genographic was adopted by the Xavante of South America in Brazil," Pedro Paulo Vieira told me, framing the A'uwẽ fieldwork as the pinnacle of the Genographic in Brazil:

They are a people with an extremely strong culture – extremely ancestral, extremely rich – who, instead of wanting to understand what we were doing, simply absorbed the Genographic into their own culture. Fabrício, myself, and some other members of our team were even assigned to clans

⁷¹ Santos, interview.

⁷² Ibid.

⁷³ Ibid.

within the aldeia. I was given a name. We participated in Xavante rituals. That is to say, we became part of the Xavante community because of the project.⁷⁴

Vieira emphasized Etênhiritipá's adoption of both the researchers and the project. This inclusion was compelling to the biophysicist because it was both personal and intellectual; it incorporated an invitation to remarry his wife in the aldeia alongside a perceived interest and investment in the scientific work itself. The researchers were struck by what they perceived as the authenticity of their hosts. At the same time, they felt embraced, included in this authenticity.

Focusing on the application, uses, and cultivation of affect highlights the extensive care work involved for A'uwẽ communities to host outsiders. The narratives that the Genographic researchers offered suggest that A'uwẽ subjects went to substantial trouble to inculcate certain affective states in the researchers who visited them. Rituals needed explanation. Equipment had to be protected. Even spontaneous decisions, such as a hunting or fishing trip, involved extensive work.

This experience of belonging was essential to the researchers' understandings of their fieldwork, and they mobilized this perceived acceptance and belonging to make claims about the legitimacy of their work through our conversations. But this sense of belonging and acceptance was also – and continues to be – marshalled by A'uwẽ with the expectation of mutuality. The investment to bring researchers into the affective field is about building enduring relationships to shape research through dialogue, and form experts who can be called upon to address community needs. However, when community members invest in Santos or me, they face the possibility that we will disappoint or betray. It is a precarious strategy within the double bind of state recognition.

Conclusion

The use and reuse of blood samples is a pressing moral question of late twentieth- and early twenty-first-century genetics. In the words of Emma Kowal, Joanna Radin, and Jenny Reardon, “Within biomedicine, indigenous biospecimens are increasingly the crucibles in which ethical practice is determined.”⁷⁵ An extensive and thoughtful literature in STS (science and technology studies), history of science, and Native Studies has explored the stakes of genetic research for defining Indigeneity,⁷⁶ grappling with questions of

⁷⁴ Vieira, interview.

⁷⁵ Emma Kowal, Jenny Reardon, and Joanna Radin, “Indigenous Body Parts, Mutating Temporalities, and the Half-Lives of Postcolonial Technoscience,” *Social Studies of Science* 43, no. 4 (2013): 477.

⁷⁶ Kim TallBear, “Genomic Articulations of Indigeneity,” *Social Studies of Science* 43, no. 4 (2013): 509–533, <https://doi.org/10.1177/0306312713483893>; Arvin, *Possessing Polynesians*.

scientific responsibilities toward communities whose DNA is under study and the value (often conflicting) that geneticists and communities place on stored samples.⁷⁷ There are many important critiques that have been raised regarding the Genographic Project, and it seems Santos, Vieira, and colleagues had little latitude to adjust their scientific practices in conversation with residents of T.I. Pimentel Barbosa. However, their navigation of both the regulatory systems of the Brazilian state and the oversight of their A'uwê hosts – even if limited by structural constraints – exists in contrast to the work of some other human geneticists.

In the wake of the Genographic's hurdles with the ethics council, other geneticists expressed intense concerns and pessimism regarding the regulatory system and the ability to continue their work. In 2012, I asked senior geneticist Francisco Salzano, widely considered a founder of Brazilian human genetics, about timelines for getting new regulatory permission for sampling in Indigenous communities. He lamented, "Now there is what I call *geneticophobia* . . . When you speak of DNA, everyone is horrified, and thinks that the genome of a person will be patented. This is also reflected in the regulations of the National Commission for Ethics in Research, CONEP." The regulatory experience of the Genographic Project was the first example he gave of how research regulations apply to genetics work with Indigenous populations: "For approval of these studies in Brazil, it took at least three years, with requests for information going back and forth."⁷⁸ Maria Cátira Bortolini described this saying, "it's an incredibly complicated thing to get approval from the Ethics Council to study Indigenous communities. So, like I said, we do not do new collections. We have used samples called historical samples with an approval to use these historical samples."⁷⁹ Among the samples still in use by Salzano and Bortolini's team as of 2017 were those first collected by Salzano and colleagues in T.I. Wedezé in 1962.

Salzano received ethics committee approval through his institution shortly after the National Council of Health instituted the new oversight system in 1996. The collections, which he had made over four decades were one of the foundations of his career until his death in 2018, and also provided material for analysis by dozens of doctoral students, some of whom went on to become

On broader issues of genetic articulations of race in Latin America, see Peter Wade et al., eds., *Mestizo Genomics: Race Mixture, Nation, and Science in Latin America* (Durham, NC: Duke University Press, 2014).

⁷⁷ Warwick Anderson, "Objectivity and Its Discontents," *Social Studies of Science* 43, no. 4 (2013): 557–576, <https://doi.org/10.1177/0306312712455732>; Emma Kowal, "Orphan DNA: Indigenous Samples, Ethical Biovalue and Postcolonial Science," *Social Studies of Science* 43, no. 4 (2013): 577–597; Joanna Radin, *Life on Ice: A History of New Uses for Cold Blood* (Chicago: University of Chicago Press, 2017).

⁷⁸ Salzano, interview.

⁷⁹ Maria Cátira Bortolini, interview with Rosanna Dent, Porto Alegre, January 28, 2014.

close collaborators.⁸⁰ In most cases, the researchers did not return to the Indigenous communities where the original sampling took place to conduct ongoing consent processes. Because the intellectual questions of the research group have remained focused exclusively on the genetic history of the populating of the Americas and questions of human evolution and differentiation, the university ethics committee approved ongoing use.⁸¹ This is despite the fact that most of the technologies and techniques now used did not exist when the scientists collected the original samples. When geneticists claim, “what genome scientists are trying to obtain is a history of humankind in general, not of only one ethnic group,”⁸² and position historic collections as *patrimônio da humanidade* or human patrimony, they make claims through a logic of possession.

In my discussions with Bortolini and other members and former members of her lab, I emphasize what I see as the minimum imperative for ongoing consent from communities whose members and ancestors are being studied. While she and others have used the regulatory difficulties of the Genographic Project as evidence for the bureaucratic impossibility of obtaining such consent, I have used Santos’s engagement by Etênhiritipá as an example of why such ongoing discussions are an ethical necessity. Neither of our positions is innocent, and the conversation is ongoing. Likewise, before the pandemic, I began to discuss the stored samples with community members in the aldeias of Etênhiritipá and Pimentel Barbosa in what I imagine will be a much longer-term conversation. Already community members have taken delight in certain aspects of the history of the genetics research, including work underway to return anthropometric photographs from the 1960s in digital format.⁸³ They have also begun to draw parallels between the presence of their samples in laboratories and the histories of collection, use, and sale of samples from Paiter (Suruí) and Karitiana aldeias.⁸⁴

For Santos or Bortolini or for me, even if we embrace meaningful long-term engagement in Pimentel Barbosa, we may not be able to disavow the possessive logics of the state. However, by working through the affective field of A’uwẽ regulations of research, we may open ourselves up to being changed.

⁸⁰ Francisco Mauro Salzano and Sidia M. Callegari-Jacques, *South American Indians: A Case Study in Evolution* (Oxford: Oxford University Press, 1988); Francisco M. Salzano and Maria C. Bortolini, *The Evolution and Genetics of Latin American Populations* (Cambridge: Cambridge University Press, 2005).

⁸¹ José Roberto Goldim, interview with Rosanna Dent, Porto Alegre, June 16, 2014.

⁸² Francisco M. Salzano, “Bioethics, Population Studies, and Geneticophobia,” *Journal of Community Genetics* 6, no. 3 (2015): 199, doi:10.1007/s12687-014-0211-3.

⁸³ This NSF-funded project, “Digital Archives and Indigenous Afterlives of Scientific Objects” is a collaboration with six aldeias and James R. Welch (ENSP-FIOCRUZ), Lori Jahnke (Emory University), and Laura R. Graham (University of Iowa).

⁸⁴ Fieldnotes, July 2019.

As TallBear writes, “A researcher who is willing to learn how to ‘stand with’ a community of subjects is willing to be altered, to revise her stakes in the knowledge to be produced.”⁸⁵ I am unsure what will be asked of me as I collaborate on a digital archive project in six aldeias, but while I may not be able to shift the possessive logics of recognition, at least with A’uwẽ community members we can work to shift the logics of the research itself.

⁸⁵ TallBear, “Standing with and Speaking as Faith,” 2.