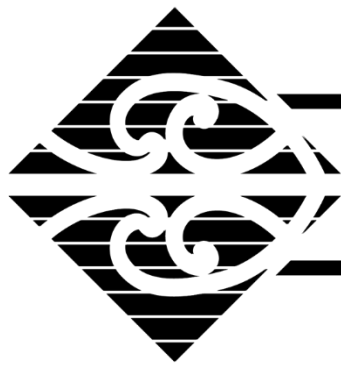




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Data as the New Land: Leveraging AI through Decolonization, Indigenous Sovereignty, and Epistemological Resistance

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Abstract

This paper interrogates the uncritical adoption of artificial intelligence (AI) in Indigenous contexts as a new frontier of colonization. We conceptualize data not as neutral, but as *the new land*: a territory for extraction and a relative carrying stories, languages, and relationships. AI's harvesting of intimate community data mirrors historical patterns of resource dispossession, raising urgent questions of data sovereignty. A fundamental epistemological conflict exists: can AI, built on quantification, ever respect Indigenous relationality and responsibility? Trained on data from oppressive systems, AI risks automating historical trauma, becoming a tool for surveillance and family disruption. Therefore, mere harm mitigation is insufficient.

We argue for a reclamation of power through Indigenous data sovereignty—the ownership and governance of data grounded in Traditional Knowledge. True progress requires Indigenous communities leading the design and ethical frameworks of technology, reshaping AI into a tool for cultural continuance, not renewed assimilation.

Keywords: Indigenous data sovereignty, Indigenous AI governance, digital colonialism, epistemological conflict, data as the New Land

He Mihi – Acknowledgements: As you chart your way through this critical analysis of AI's colonial contours, it is critical we ground this conversation within the rich and growing body of Indigenous-led and allied scholarship that has laid the groundwork for such assertions. Seminal frameworks like the First Nations Information Governance Centre's OCAP® principles and the international CARE Principles for Indigenous Data Governance (Collective Benefit, Authority to Control, Responsibility, and Ethics) have established the foundational norms for self-determination in data, moving beyond simple ownership toward holistic governance and relational accountability. This work builds directly on foundational texts that established Indigenous data sovereignty as both a right and a necessity, powerfully articulated by scholars such as Kukutai and Taylor and advanced by Rodriguez-Lonebear and Russo Carroll et al. who

have operationalized these principles in research and policy. Simultaneously, Linda Tuhiwai Smith's work on decolonizing methodologies and Eve Tuck and K. Wayne Yang's critiques of "decolonization" provide the epistemological backbone for understanding data extraction as a continuation of colonial violence.

Crucially, Indigenous scholars and communities have not merely theorized resistance but are actively building alternatives; pioneering projects like Aotearoa New Zealand's Te Hiku Media, which develops Māori language transcription tools to reclaim and protect *te reo*, and Canada's Métis-led Wâsikan Kisewâtisiwin (AI with heart), which identifies and renders harmful stereotypes, demonstrate what Indigenous-led AI governance looks like in practice. The Indigenous Protocol and Artificial Intelligence (IP-AI) Working Group has similarly produced essential guidelines for designing AI systems that center Indigenous values and relationality. This manuscript stands on the shoulders of scholars like Jason Edward Lewis, Tahu Kukutai, Maggie Walter, Annita Lucchesi, and many others who have consistently and unapologetically named the violence of algorithmic systems while charting paths toward epistemological resistance and technological sovereignty. Their collective work transforms the concept of "data as land" from an analogy into a lived political and cultural reality, which this paper seeks to honor and extend.

Introduction

AI systems thrive on vast amounts of data. How then might harvesting information about Indigenous children, families, and communities - their patterns, needs, and their vulnerabilities - mirror historical patterns of resource extraction and land dispossession? What does true data sovereignty look like for Indigenous Nations in the context of AI-driven child welfare, education, or health services especially in our assertion to protect our future generations?

To grasp the immense shift towards the digital age, we must understand the nature of its most critical resource. Just as the Agricultural Age was defined by the cultivation of fertile lands, and the Industrial Age by the extraction of minerals and resources, today's modern world is propelled by a new, pervasive and intangible raw material - a resource generated by clicks, transactions, devices, and online interactions. It is vast and untamed, holding immense value for those who

would own, cultivate, and develop it. It is in this context that we comprehend the potent analogy of Data as the New Land - a foundational territory where contemporary colonial systems are being reconstituted, borders are being contested, and where futures are mapped (see Rodriguez-Lonebear, 2016).

The title "Data as the New Land" is not simply allegorical or poetic; it is deeply political. It is a precise and accurate framework for understanding AI, the sacredness and sentience of land, and the impending threat algorithms will have on our communities. As data scientist Kevin Horecka wrote in 2020, 'Data is not Oil, it's Land'. In it, he brought attention to the analogy of land emphasizing its enduring and reusable nature. For Indigenous communities, this analogy reveals a dreadful parallel. Data, like land, is not inert; it can be repurposed, its value is not inherent but is developed through care, and its quality and context are as crucial as soil quality is for growth.

For us, data harvesting mirrors historical extraction and dispossession practices in several ways: First, just as colonial powers saw land as a resource to be claimed, accumulated, and exploited for their own wealth and power, the data about our children's behavior in school (Kooli, 2023), our families' health patterns, and our community's vulnerabilities is extracted to train AI systems. The value generated from this data which are the predictive models, the commercial products, the policy insights rarely, if ever, flow back to the community in a meaningful, controlled, equitable or economically beneficial way. This is the modern-day equivalent of taking timber from our forests or minerals from our lands, enriching external powers while leaving the community with the scars and the stripped asset. It is an act of taking without informed reciprocity or consent.

Second, we know that the historical surveying and colonial mapping of our lands were not neutral acts; they were the precursor to dispossession, enabling control, allocation to settlers, and the imposition of foreign systems of ownership (Rose-Redwood et al 2020; Lucchesi, 2018). Similarly, data harvested about our communities creates a digital map. This map, when fed into AI systems for child welfare or policing does not simply describe reality; it actively shapes it. It identifies patterns that lead to disproportionate surveillance, flagging of

families as at-risk based on biased criteria, and ultimately, the disruption of families as a digital re-enactment of the Sixties Scoop. It is data science mapping as a form of social control and intervention (King & Meinhardt, 2024; Schneier, 2015).

Third, historically, periods of crisis or vulnerability were exploited to force treaties and land cessions. Today, real needs and vulnerabilities within our communities - such as gaps in healthcare, education, and social services - are used as justification for intrusive data collection. The promise of better services through AI becomes the Trojan horse that allows for the extraction of this sensitive data, often without the deep, community-based, culturally grounded free, prior, and informed consent that is required (Durén, 2023). It is the furtherance of exploitation of vulnerability.

Data as a Relative: A Foundational Principle of Sovereign Stewardship

True data sovereignty extends Tribal sovereignty. It is not Western data ownership but complete jurisdiction, governance, privacy, and relational responsibility over data (Kukutai et al., 2023; Lewis, 2020; Te Mana Raraunga, 2018).

For us, it means asserting:

- our right to govern and develop our own protocols, for example adhering to the OCAP® Principles (Ownership, Control, Access, and Possession) which then dictates how and on what terms data can be collected, used, stored, and shared (The First Nations Information Governance Centre (FNIGC) 2014; Lilley et al., 2024; Russo Carroll et al., 2021).
- full and absolute authority to allow or refuse any data from being collected.
- our ability to derive and expect benefits. This is, if data is used to build AI tools, the community owns the tool, govern its use, and derives benefits from any revenue or efficiencies gained.
- The right to delete - to have data expunged from all external systems, knowing that certain information is not meant to be perpetually housed in a private or public external database
- and honoring data as a Relative and as land, not a resource. Our sovereign approach is to respect data not as an inert resource but as a sacred – albeit digitalized - reflection of our people, our children, our ancestors and our

communities. It must therefore be treated with the same respect, reciprocity, and responsibility as any other relative.

Automating Colonialism: Why Ceding Data Control Cedes Self-Determination

Indigenous communities, led by youth and elders, must enact tribal laws to enforce data sovereignty, build internal capacity for data scientists and AI specialists, and engage with governments and universities as sovereign nations with treaty and legal rights, setting the terms of any data-sharing agreement. Also to develop Indigenous-centric AI systems and lead the creation of AI tools designed literally from the ground up to enhance, rather than replace, cultural practices, languages, and relational well-being.

Without these steps, the results will be devastating - a direct parallel to ongoing colonialism. We would see a rapid and insidious form of digital colonization.

We are at a precipice. The deployment of AI into our child welfare, education (Kooli, 2023) and health systems is not a future possibility; it is happening already. If we are not the architects, designers, coders or sovereign rulers of this technological integration, the outcomes we see are pre-determined and ominous. We will see power further consolidated in the hands of governments, state agencies, universities, and Big Tech, bypassing Indigenous sovereignty under the guise of public spending, science, research and innovation, efficiencies, and the common good.

We will see data on our children and families commodified, traded and then exported as a source of power and profit generation of others; it will be used to make predictions and decisions without the necessity of seeking consent.

We will see AI systems built upon western epistemological frameworks that repeatedly prescribe non-Indigenous solutions to Indigenous issues and further erode cultural practices and worldviews. An algorithm cannot fully comprehend our kinship ties and responsibility, but it will flag a child for living with her elderly grandparents instead of with her biological parents.

To cede control over Indigenous data is to cede the core of Indigenous self-determination. It would provide access to the most intimate details of people's lives to be scraped and mined and used by systems that have historically proven their capacity to do harm.

The historical disruptions to Indigenous communities, the assimilation, and the dispossession of sacred lands were not accidental outcomes of colonialism; they were its core policy mechanisms. To now allow AI systems to be built on our data and used without our control is to effectively automate these same colonial mechanisms, dressing them in a false neutrality of code and algorithms (Lovink, 2022). The net result will be the same: the erosion of self-determination and the perpetuation of harm against our future generations. We believe the time for assertive, sovereign action is now.

When Algorithms Meet Relationality: The Epistemic Collision

Indigenous Ways of Knowing, Being, Doing, and Connecting are deeply relational, holistic, and place-based (Iwasa & Mataira, 2018). AI is fundamentally built on quantification, prediction, and decontextualized aggregated data points. Can an AI system, designed within a Western-centric epistemological framework (Lovink, 2022) ever truly understand, respect, or ethically apply concepts like kinship responsibility, spiritual connection to land, genealogies, or the collective well-being (Berberich et al., 2020, Christensen, 2012; Willox et al., 2013) central to Indigenous approaches to raising children? Or does its use inherently impose an alien worldview? The short and necessary answer to this question is an emphatic, No. An AI system, as it is currently conceived, built within a Western techno-centric epistemological framework, cannot understand, respect, or ethically apply foundational Indigenous concepts. The conflict is not a bug in the software; it is a fundamental flaw – a blackbox - in the underlying worldview that built the hardware, the software, and the very definition of “data.”

Karl Popper's framework helps us see AI as a new, digital historicism – claiming immutable laws from data to predict outcomes, undermining an open society- one which recognizes we could all be wrong (Shearmur, 2006). Modern AI, particularly predictive algorithms, operates as a new, data-driven form of historicism. It claims to find laws and patterns in historical data to predict

future outcomes: who is likely to commit a crime, which child may be at risk in a family, or what preexisting health conditions should be denied. Many AI systems are deemed “Blackboxes” (Bathae, 2018). Their decision-making processes are often dense and cannot be easily scrutinized or challenged (King & Meinhardt, 2024). For an Indigenous person denied a loan or healthcare by an algorithm, how do you falsify the AI's claim? You cannot cross-examine the algorithm. The company could legitimately claim proprietary rights. The outputs (high risk) are presented as an objective fact derived from data, not a debatable opinion.

The core debate lies in the epistemological gulf between the two worldviews. AI's worldview of quantification operates by reducing the world to discrete, measurable, and decontextualized data points. It searches for correlations within vast datasets to predict future outcomes. Its “understanding” is statistical, not empathetic and its knowledge is aggregated, not contextual. It can know that a certain percentage of children in a community live with their grandparents, but it cannot comprehend the sacred cultural and kinship, connections, and responsibilities that underlie these living arrangements. Indigenous ways of knowing are the opposite: kinship as a living network, land as lived experience, well-being as process.

This leads us to understand epistemic knowing (Walter & Suina, 2019) when AI is applied. To be processed by an AI, complex, relational concepts must somehow be translated into crude, quantifiable proxies. “Kinship responsibility” might, for example, be coded as frequency of visits from family relatives, or child custodial orders. Connections to land might be coded as a postal code in a rural area or property rates or access. These are profound acts of distortion, stripping the Ways of Knowing, Being, and Doing of their meaning and context.

Once such translations are made (coded), the system *appears* to understand. The child welfare algorithm may then flag a child because her kinship proxy falls below a certain threshold, recommending intervention (Grimwood, et al 2012). It pushes Indigenous realities into categorical data features to be legible to the technology - a form of digital assimilation (Kukutai, 2023). It teaches users - both within and outside of our communities - to value what the AI system can measure and to disregard what

it cannot, thereby grinding down the intellectual sovereignty and cultural integrity of our Indigenous knowledge systems. As these epistemological conflicts become more apparent and if not addressed intentionally, AI will become the most deceptive weaponized tool of cultural assimilation in the 21st century, eroding cultural integrity from the inside out.

Consequences of Unabated Quantified Reductionism: The New Othering

When an AI system, built and trained by a private sector company is backed by the authority of the state (e.g., in child welfare, health or the judiciary), and makes predictive recommendations (decisions) based on distorted proxies, it punishes any expression of kinship, land or healing cultural practice. It creates a liminal space (where reality and AI imagination converge), where to be safe from algorithmic scrutiny, we must conform to the system's narrowly defined categories of what is family, well-being or success. This leads to the slow, deliberate bureaucratic sterilization of a vibrant and complex culture and community where kinship and spiritual connections are taught, felt, and lived.

One other consequence of using AI as a reductionist rather than relational tool is it forces us to set the limits of our own futures. If, for instance, AI systems that govern welfare services only recognize quantifiable reality, we would eventually stop nurturing the qualities we cannot see in data. We could then begin to devalue the

deeply held, unquantifiable relational work of our elders, our mothers, and knowledge-keepers because it does not register as evidence-based, efficient or optimal to the algorithm. The technology, designed with the limitation of not understanding relationality, may cause us to forget it ourselves. The greater risk is that we will begin to internalize these limitations.

This is not a technological misalignment; we see it as a battle of ontologies. The thought of deploying some externally designed AI on Indigenous communities without acknowledging sovereign, epistemic control is to authorize a computational system to dictate the terms of what is real, valuable, and genuine about our communities. The result is not only a flawed, inaccurate tool, but the active dismantling of the epistemological foundations necessary for the future of Indigenous culture and communities to pass on knowledge to younger generations. This exemplifies Said's notion of Othering (1978), as the externally designed AI system creates a binary where its own rational computational logic is the authoritative standard, while relegating the community's knowledge and ways of being to the status of an inferior, unvalidated "Other." This process actively dismantles the community's epistemology, ensuring that only what the system recognizes is preserved, thereby foreclosing a future built on their own authentic cultural foundations (ELHajjar, 2025). To underscore this, we proffer the following vignette to respectfully illustrate our point:

Vignette: AI Risk Score – Hawaiian Context

System: The Hawai'i Department of Human Services uses an AI-driven 'Ohana Safety Metric. The model is trained on a decade of case data from the islands.

Data Abstraction: The algorithm identifies risk patterns from historical cases. It learns that cases are more likely to be substantiated if they involve: overcrowding, specific zip codes, prior unsubstantiated reports, and late utility payments. It assigns a risk score from 1 to 100.

Lived Consequence: Leilani is a Native Hawaiian mother of three, living with two of her keiki (children) and her mother (Tutu) in a three-bedroom house in Wai'anae. The home is multigenerational, a cultural norm and economic necessity. Leilani works and studies; her mother Tutu (who has diabetes) helps with childcare. Money is tight, and last month, after an unexpected car repair, Leilani paid the electric bill two weeks late.

Her 8-year-old son, Kaimana, is an energetic boy. At school, he mentioned to a teacher that sometimes there's no hot water for baths because the gas was turned off (a one-time incident when the tank ran out before the scheduled delivery). The teacher, a concerned newcomer from the mainland, files a mandated report.

The Algorithmic Translation:

Household Composition: 5 individuals, 3 bedrooms → flagged for “potential overcrowding”: **+20 points**

Census Tract (Wai‘anae): (historically high rates of investigation and foster placement, correlated with systemic poverty and underservice)
+35 points

Late Utility Payment data-shared with the utility company: → flagged as “housing instability”
+15 points

Report Source: “Educational professional”: +10 points

No Record of Pediatric Visits in Last 14 Months: (The algorithm doesn’t see care from a trusted Native Hawaiian health center). **+20 points**

Total Risk Score: 100/100 – “Immediate Response Required.”

Intervention:

CWS investigator Stephanie, who is based in Honolulu and unfamiliar with the specific practices of the Wai‘anae community, receives the high-priority alert. Protocol demands an immediate in-person visit. She arrives during the late afternoon, when Tutu is home with the children, and Leilani is in transit from work. The visit feels abrupt and authoritative.

Stephanie, guided by the risk flags, focuses on the lack of hot water, the number of people in the home, and the “missing” medical records. She questions Tutu’s ability to supervise the children given her health. The concept of multigenerational living - a core source of strength, cultural knowledge, and resilience for the family - is framed in the investigation as a risk factor of “overcrowding.” The trust-based, community-embedded model of their healthcare is invisible to the system, rendering their actual wellness activities nonexistent in the data.

Outcome:

The algorithm did not see a tight knit ‘ohana (extended family) functioning within a strong cultural framework, navigating the high costs and logistical challenges of island life. It saw a statistical composite of risk, learned from historical data that reflects decades of inequitable resource distribution, the colonial legacy of family disruption in Native Hawaiian communities, and the over-surveillance of low-income and rural neighborhoods.

The lived consequence is a traumatic investigation that pathologizes family and cultural structures, sows distrust in a system perceived as an outside force and pulls a hard-working mother into a frightening bureaucratic process. It also reinforces a devastating feedback loop: this investigation becomes another data point from Wai‘anae, further teaching the algorithm that families from this community are “high-risk,” perpetuating a cycle of surveillance rather than offering culturally grounded, preventative support.

From Ideology to Dataism: Codifying Bias as “Objective” Risk

Colonial systems have caused generational harm: residential schools, Sixties Scoops, forced sterilization, discriminatory child welfare, and the Stolen Generation. AI systems trained on data from these biased systems risk

automating and proliferating these same biases. How can we ensure tools colonial systems have caused generational harm: residential schools, Sixties Scoops, forced sterilization, discriminatory child welfare, and the Stolen Generation. AI systems trained on data from these biased systems risk automating and

proliferating these same biases. How can we ensure tools

used in professions like social work (Reamer, 2023, NASW, 2025), public health, medicine, education, and justice do not become the next iteration of systemic tools for surveillance, disproportionate intervention, and the disruption and disconnection of Indigenous families and cultural transmission under the guise of objective efficiency?

We fear that AI will automate historical biases. This is not a speculative risk but a certainty that comes with machine learning. AI becomes the mirror. When trained on non-aggregated data generated by systems steeped in colonial bias (Lewis, 2023) - such as child welfare, policing, and education - AI does not see the bias as an error to be corrected. It sees it as a pattern to be refined, improved, and scaled.

The core mechanism in question is this: Western systems of health, education, welfare and justice have manifestly over-surveilled, over-policed, and over-pathologized Indigenous families, creating a data trail that shows disproportionately high rates of intervention. An AI model, starved of correlation, will learn that Indigeneity (or its proxies, like postal codes, income levels, family structure, ethnicity) is a strong predictor of risk. It then codifies what it has - as racist and colonial logic - into its algorithm, creating a feedback loop of injustice.

While we all have our own biases, we are capable as human beings of mercy, recognizing context, and cultural understanding. An AI algorithm has no such capacity. It will recommend intervention at a scale and consistency no human system could achieve, relentlessly applying a distorted logic of the past to the present thereby compounding bias. Perhaps this is the most terrifying part. The historical harms of residential schools and the Sixties Scoop were justified by a paternalistic, racist ideology that was, in its time, considered enlightened. Today, the ideology is that of dataism. When an algorithm, trained and backed by the aura of mathematical neutrality, flags a family as high-risk, it is far harder to challenge than if this were a human decision. The system deflects criticism by pointing to its objective data, obscuring the colonial prejudices baked into that very data (Lohr, 2015).

Objectivity has historically been a colonial tool. In response Indigenous scholars have long advocated for decolonizing methodologies centering Indigenous voices, values, and worldviews (Battiste, 2002; Chinn, 2007; Kovach, 2021; Simpson, 2017; Smith, 2021; Wilson, 2008). As Kierkegaard argued, genuine truth is subjective commitment, not detached fact (Schacht, 1973).

Arguably, the primary selling point of AI is its efficiency in determining quantifiable metrics and performance measures. Its optimization capabilities as a strategic process for achieving best possible outcomes in the context of efficiency means identifying problem families or at-risk youth faster and with less human involvement. This automates the pipeline that leads to family disruption, accelerating the very process that caused the Sixties Scoop in Canada, and the Dawn Raids in Aotearoa New Zealand, but now under the unblinking gaze of an algorithm.

Mitigating the Next Iteration of Harm: Closed domains and culturally grounded AI

Indigenous-led efforts - the Wicanhble S'a Center, Indigenous Protocol and Artificial Intelligence (IPAI) Working Group, Cardiac Inherited Disease Group (New Zealand), and Global Indigenous Data Alliance (GIDA)- are building frameworks and promoting sovereignty through CARE Principles. Te Hiku Media in Aotearoa New Zealand has created Māori language transcription tools to reclaim and protect te reo Māori (language). In Canada, the Métis-led Wâsikan Kisewâtisiwin ("AI with Heart") project has designed a tool to identify and correct harmful stereotypes in written materials, re-centering Indigenous perspectives.

Prevention requires a rejection of the notion that these systems are neutral and unimpeachable. It demands we in our communities consider placing a clear moratorium on high-stakes use. It would seem obvious that we take decisive collective steps to halt the deployment of predictive AI in child welfare and justice for Indigenous populations until robust, Indigenous-led governance is in place. The precautionary principle must apply. We have a means to audit the data, not just the algorithm. Our focus must shift to training data, to rigorous, independent analysis. It requires we invest in our own

Indigenous data scientists, trained to do archaeological digs into the layers of bias, to extract the colonial history embedded in data.

We must build bounded, community-approved AI tools that operate only on predefined data. A closed-domain, culturally grounded AI is a vital tool for Indigenous data sovereignty (UN General Assembly, 2007; Russo Carroll et al. 2021). By operating within a limited, community-defined scope and incorporating deep cultural understanding, it safeguards Indigenous knowledge from distortion and ensures that the community itself remains the authoritative source of its own culture and history.

What will the future look like if we do not address this? AI, we believe, will perpetuate institutional trauma, an autonomous generative architecture of future disruption. We see signs of a digital residential school system. Not with bricks and mortar, but with code and data. The underlying logic remains the same - the assertion that the state knows better than Indigenous families how to raise their children - but it is now executed with the terrifying efficiency and scale of automation. We envision recurring trauma. The pain of a child being removed from their family, their culture, and their land will be the same. The intergenerational devastation will be the same. The only difference is that the removal order will be triggered by an algorithm, making the process feel inevitable and erasing the human accountability that, however flawed, once existed. We envision an atomizing of responsibility. That is, when the next generation of children is traumatized by this system, who will be held accountable? The engineers, politician, or the algorithm itself. This diffusion will prevent justice and healing, locking the trauma into the system with no one to answer for it. We envision harm being masked as progress - a technical solution to a social problem - where the disruption of families will be framed as “early intervention,” and the erosion of culture as the unmentioned side effect of “risk-based modeling.” This ugly veneer of technological progress will silence its critics allowing harm to continue under a new guise.

Neither the Stolen Generation in Australia nor the Sixties Scoop were anomalies; they were a manifestation of a system's logic. To feed that system's data into AI is to give its logic eternal life. The result will be a 21st-century colonial tool, polished to a high-tech sheen, perpetually re-

enacting the worst chapters of history while its operators claim they are merely tracking the data.

Defining Future: Towards Indigenous-Led AI Design, Governance, and Ethical Frameworks

What would it look like if Indigenous communities lead the design, governance, and ethical frameworks of technology? Will this strengthen rather than depose our Ways of Knowing, Doing, Connecting, and Being? (Nguyen, et al., 2023).

The uncritical adoption of externally developed AI is not a misstep in the path towards data sovereignty; it is a fundamental repudiation of it. Sovereignty, as generally understood, requires a radical rebalancing of power - the transfer of control over land, resources, and, critically, *futures* back to Indigenous Nations (Coulthard, 2014; Mandela, 1994). To outsource the well-being of Indigenous children to systems designed and controlled by the very entities that have historically orchestrated their dispossession, and assimilation is to perpetuate the colonial relationship under a new digital banner. It is the assertion of technology as a public relations campaign, masking the continued denial of self-determination. Embracing externally developed AI for “child well-being” is the precise definition of digital colonization, and its frontier is the most intimate and sacred of spaces: the minds, relationships, and life paths of our children. This digital colonization operates on three levels:

1. When an algorithm is trained to identify features such as “risk,” “neglect,” “well-being,” or “protective factors” it imposes a specific cultural and philosophical standard. For a child to be “safe” according to the AI system, they are forced to conform to a nuclear family model, a specific domicile pattern, or to a Western metric of success that is unconnected to their culture. This is a colonization of consciousness, a colonization of the mind a conditioning of children to believe their lived reality is abnormal unless it is recognized by the machine.
2. By quantifying and monitoring family and community interactions, the AI system reengineers kinship. It turns sacred, reciprocal relationships into data points to be assessed for risk. This

creates a disturbing effect, where families may avoid practicing their culture (e.g., communal living, traditional discipline) lest it be misread by the algorithm as a “vulnerability”. This is a colonization of relationships.

3. The predictive nature of AI is its most colonizing force. By using past data from colonial systems, it projects and predicts a future of continued intervention and surveillance. It does not envision a future of healed, self-determining Indigenous communities; it automates the path of the past, fixing in systemic bias under the guise of objective forecasting. It colonizes time itself, foreclosing on alternative futures (Tapu & Fa’agau, 2022).

We contend this is not about making existing AI more culturally sensitive but a foundational re-imagining where technology is subservient to sovereignty and culture. It is about designing from ontology, not data, governance as sovereignty in action, and strength-based, not deficit-based tools.

Start not with a dataset but with the question: “How can technology strengthen our ways of knowing?” Designed from ontology, not data. The process would be led by elders, knowledge keepers, youth, and community leaders. It may result in tools that are not predictive, but relational - for example, a system that helps map kinship networks to ensure ceremonial responsibilities are met and maintained.

Communities would hold not just a seat at the table but hold the gavel as well. This means Tribal laws, treaties and governance, not state or corporate policy, guide the technology's ecosystem and lifecycle. Ethical frameworks and sacred boundaries (Harvey, 2003; Mataira, 2000) are derived from ancestral teachings, not from Silicon Valley-centered utilitarianism. Governance is a demonstration of sovereignty in action.

Instead of focusing on risk or vulnerability, Indigenous-led AI would be designed to identify and reinforce cultural strengths. It could help monitor the health of language revitalization, track the passing down of specific skills like sustainable hunting and fishing, weaving and artwork, environmental practices (Nakamura, 2013; McGregor, 2004), or facilitate land-based

education. Its core function would be to celebrate and honor cultural continuity.

Conclusion

The choice before us is not merely about technology but about the finality of colonial control. Passive adoption would be a point of no return.

To cede control over those systems that manage child well-being, health, and education is to cede a vital cornerstone of self-determination. It will lock Indigenous communities into a state of permanent technological dependency, where our most sacred social functions are governed by external, incomprehensible, and unaccountable black boxes and systems prone to hallucinate.

By allowing external AI to define Indigenous well-being, we are allowing it to define the future. Seeking proactive leadership to define technological futures is the modern equivalent of the treaty-making process. To be passive is to accept terms dictated by others, terms that will inevitably prioritize assimilation over cultural vitality. Historically, resistance has targeted physical policies, laws, and structures. It is clear: the diffuse, technical, and apparent objective nature of AI-based colonization is designed to neutralize our resistance. It creates a system of disenfranchisement and harm so complex and decentralized that fighting it feels futile, leading to a forced, passive adoption that is the very antithesis of liberation.

The defining question of the next generation will be: Who gets to define the future? Will it be defined by the data-extractive, assimilationist logic of external AI, or by relational, place-based, and sovereign wisdom of our communities? To choose the former is to choose a future where government reconciliation is a hollow word, and colonization is complete, having seamlessly migrated from the land to mind, to data. The path forward is to strengthen proactive, assertive leadership in defining, building, and governing the technological world that will shape our children's lives.

For us, the verdict is either/or. The adoption of AI crystallizes a new colonial frontier where data is the new land, where the epistemic violence cannot comprehend relationality, and the

unsettling automation of historical trauma continues through biased algorithms.

A silent, bureaucratic war is being waged not with foot soldiers, but with datasets, not with treaties, but with terms of service (Kissinger et al. 2021). It colonizes by redefining well-being, severing relationships by quantifying kinship, and foreclosing on our future by predicting pathways for perpetual algorithm intervention luring us toward a future where the logic of colonialism is encoded, scaled, and rendered too impenetrable to protest by AI's sheer technical complexity.

Whether AI can be made safe *for* Indigenous communities, the navigational route that honors the rights of future generations is to demand sovereignty manifest *within* and *over* AI. This requires a reclamation: the assertion that data as a relative to be stewarded, not a resource to be mined; that the design of technologies emerge from ontology, not just datasets; and that governance of these tools derives from ancestral wisdom (Kimmerer, 2013) not corporate utilitarianism.

Behind us lies the long shadow of colonial systems that sought to dismantle and harm Indigenous children, families and cultures. Before us stretch two futures. In one, the rhythm of life is dictated by the architectural heartbeat of an algorithm, a future of managed assimilation, and sterile cultural survival. In the other, technology is humbled into a tool - a modern vessel for ancient fires, used to map kinship ties, to revitalize language, fortify connections that have always sustained Indigenous peoples (McGregor; 2004) and raise healthy children firm in the knowing of who they are. The choice seems obvious. We must either be the architects of our own technological destinies or become the subjects of a new sovereign: the code itself. The work of our younger generation is not to adapt to this new world, but to build it. They must have the opportunity to honor and exercise their mana - their sovereign power (Makahi, 2023; Crabbe et al. 2017) to claim the digital world as one they recognize as their own.

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