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RESEARCH ARTICLE

Gugwilx'ya'ansk and goats: Indigenous perspectives on governance, stewardship and relationality in mountain goat (mati) hunting in Gitga'at territory

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Abstract

1. Indigenous peoples' deep time relationships with ecosystems hold valuable lessons on how humans can relate to, and be stewards in, the natural world. At the crux of these lessons is the multifaceted way Indigenous peoples participate within ecosystems.
2. This paper describes this multifaceted connection between people and place by analysing a legal and pedagogical philosophy called gugwilx'ya'ansk amongst the Ts'msyen (Tsimshian) people of the northwest coast of North America.
3. The author, an Indigenous anthropologist from the Gitk'a'ata (Gitga'at) tribe of the Tsimshian, narrates how gugwilx'ya'ansk weaves education, governance, identity, spirituality, and ritual into land-based practices for the purpose of deep-time stewardship. Through autoethnographic narrative and storytelling, he focuses on his own journey of being groomed into becoming a mountain goat hunter within the hereditary governance system of his community, and how this process revealed a methodology to achieve relationality and reciprocity on the landscape while harvesting.
4. This paper concludes by reflecting on why this Indigenous methodology has been successful for the author, and what lessons it has to offer greater society.

KEYWORDS
Gitga'at, Indigenous harvesting, Indigenous hunting, Indigenous religion, Indigenous stewardship, mountain goat, traditional ecological knowledge, traditional resource and environmental management, Tsimshian

1 | INTRODUCTION

In the book *The North American Model of Wildlife Conservation* there is a simple yet profoundly instructive sentiment: 'conservation is never complete. It is an ongoing problem requiring ongoing efforts that play out in a dynamic social reality' (Mahoney et al., 2019, pp. 4). This sentiment reminds us that in our relationship with the natural world, there is an inherent fluidity that demands ongoing analysis, inquiry, dedication and humility. Humans aren't naturally conservationists, and it is damaging to assume or imagine us as such (Borrows, 2019a),

yet what is natural, is our ability to build and maintain relationships with living things around us. At the core of ecological conservation, management or stewardship, is using the human strength of relationship building to create a consciousness of how we fit into our ecologies relationally, while weaving this understanding into our culture's societal fabric. When human and non-human relationships are respected and honed over a deep-time connection to land, societies can create social, legal, spiritual and political structures that honour both human needs and those of the natural world (Fowler & Lepofsky, 2011).

To shine a light on a relational approach to ecological stewardship ethics, this paper approaches the topic through an Indigenous lens. Indigenous concepts of conservation have been recognized as essential in modern ecological studies (D'Arcy & Kuan, 2023; Fernández-Llamazares et al., 2021; Garnett et al., 2018; Nelson & Shilling, 2018). Indigenous cultures portray lessons for society today by embedding themselves within their ecosystems and maintaining longstanding goals of mutual reciprocity between human and non-human relationships. Many Indigenous 'managers' do not see themselves as inherently separate from a managed system, while understanding that respect is due to all parts of that system regardless of its utilitarian value (Cruikshank, 1981; Lertzman, 2009; Turner & Berkes, 2006). Deep time histories, dedication to place, and a lack of human exceptionalism help define the success of Indigenous management practices.

To illustrate this on-the-ground dynamic, I look to my own people, the Gitk̲'a'ata (Gitga'at First Nation), a Ts'msyen (Tsimshian) people of the Pacific Northwest Coast. Guided by the following research question: *How are Gitk̲'a'ata harvesting, governance and pedagogical processes intertwined, and what can they teach us about ecological stewardship?* I discuss how a Ts'msyen legal and pedagogical philosophy engrains ecological stewardship in its practitioners by weaving identity, morals, values, spirituality and laws into relationality and reciprocity on the landscape. The philosophy, called *gugwilx'ya'ansk*, grounds this discussion in Ts'msyen socio-politics while extending its lessons to the on-the-ground harvesting practices of my people. Through an autoethnographic and story-based lens, I tell my own journey of learning Ts'msyen harvesting practices, values, philosophies and governance with Gitk̲'a'ata Elders who were born and raised in a culturally significant place in our territory called *Laxg̲a̲lts'ap* (Lepofsky et al., 2017). Cultural aspects of hunting enshrine a moral code and engrain ecological stewardship into its practitioners (Reo & Whyte, 2012), and by showcasing *mati* (Mountain Goats, *Oreamnos Americanus*), I take this conversation into both the ethical and metaphysical world by highlighting the importance of oral history, traditional ecological knowledge (TEK) and spirituality in Gitk̲'a'ata harvesting practices. I detail three methodological steps within *gugwilx'ya'ansk*; first, becoming a student and scholar of the Gitk̲'a'ata laws and histories in a specific geography. Second, living these teachings to actively participate in the ecosystem and facilitate connection and balance to the place they derive from. And finally, tending this connection in a metaphysical way for moral grounding, communication with and further insight into the ecosystem. These three steps shed light onto the multi-faceted and wholistic governance systems of the Indigenous people on the Pacific Northwest Coast. Through these three steps my journey portrays how creating practitioners who are not passive occupants, but active participants in their ecosystems, builds a foundation for relationality and reciprocity with the non-human world.

2 | THE GITK̲'A'ATA AND LAXG̲A̲LTS'AP

The Gitk̲'a'ata are a nation and tribe within the larger Ts'msyen people who have resided in the lands and waters of the Pacific Northwest Coast since time immemorial. The Gitk̲'a'ata hold collective roots spanning the upper Skeena River to the outermost islands of the southern portions of Ts'msyen territory. The coastal archipelago has shaped the language, politics, economy, spirituality and arts of my people. Known for its biodiversity, this landscape supports an array of beings whose homes range from the ocean deep and intertidal beaches, to the riparian zones of salmon-bearing rivers that flow alongside old-growth cedar forests that extend to the rocky alpine. The beings who make up these ecosystems are interwoven in our culture and showcased in song, story, law, art, spirit and food.

Ts'msyen society is grounded in our hereditary governance system. Access, ownership and the stewardship of resources are inherited matrilineally, and specific territories are overseen by different clans (*pteex*) and subdivisions of houses within the clan called *waap*. The Gitk̲'a'ata are made up of three main *pteex*—the *Gispudwada* (Killerwhale), *Ganhada* (Raven) and *Laxskiik* (Eagle)—each with several *waap*. These matrilineal clans engage in the longstanding Ts'msyen political institution, the *luulgit*, known in English as the potlatch or feast. Today, the *luulgit* is still practised by all Ts'msyen tribes and nations within the Ts'msyen people. The legal complexity of the *luulgit* rivals any modern governance system, though one could potentially analogize it as a 'parliament', where the formalization of political decisions surrounding resources, economy and societal function are made (Beynon et al., 2000; McDonald, 1995; Napoleon, 2009; Seguin, 1984).

Most Gitk̲'a'ata members today reside in the current village of *Txałgiiw* (Hartley Bay) and the nearest urban centre of *Kxeen* (Prince Rupert). Gitk̲'a'ata territory is expansive with many ancestral village sites, each belonging to one of the three *pteex*. Situated amongst the many village sites in Gitk̲'a'ata territory is *Laxg̲a̲lts'ap*, commonly referred to as 'Old Town', the main wintering village of all Gitk̲'a'ata prior to colonization (Figure 1). *Laxg̲a̲lts'ap* refers to both the watershed and main village site and is still viewed as 'home' to our people (Greening, 2024; Lepofsky et al., 2017). It wasn't until the creation of Indian Reserves in 1889 that our community was moved from *Laxg̲a̲lts'ap* to *Txałgiiw*. Yet throughout colonization, our people have remained connected to places like *Laxg̲a̲lts'ap* by continuing to live off the same lands and waters that our ancestors did for millennia. Today, *Laxg̲a̲lts'ap* is seen as a breadbasket for our people and is still utilized as a seasonal village.

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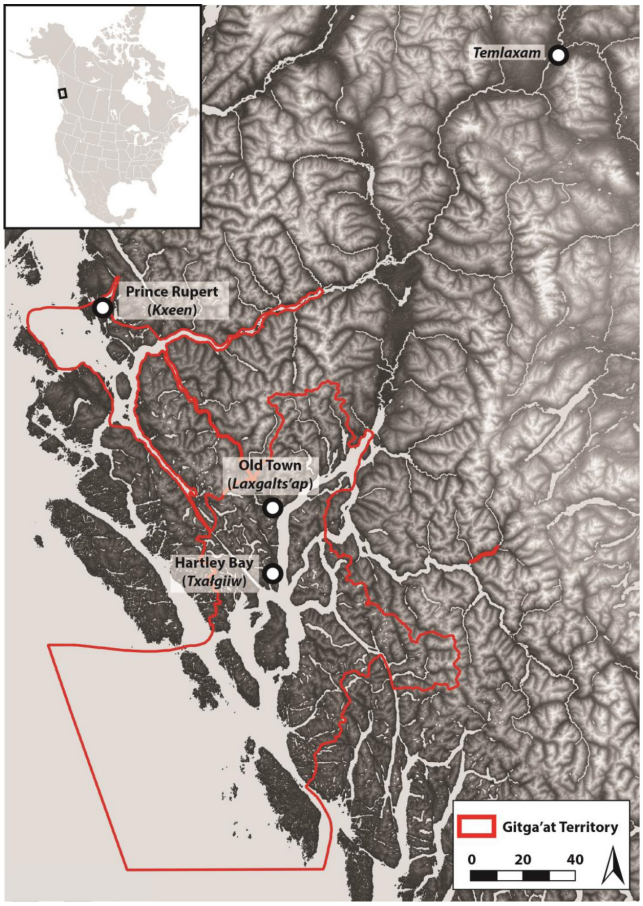

FIGURE 1 The modern village of Hartley Bay (*Txałgiiw*), the nearest urban of Prince Rupert (*Kxeen*) and Douglas Channel (*Gisi Xamu*) connecting Old Town (*Laxg̲a̲lts'ap*) to Hartley Bay- all situated within Gitga'at Territory (At the time of publication this territorial map is being redrawn by the Gitga'at First Nation. This version is not intended to be a final articulation of Gitga'at territory and any associated aboriginal and inherent rights). *Map courtesy of Bryn Letham*.

Many of my Elders were born and raised there in the summer and fall months, the seasons when we harvest the highly prized salmon, alongside the many plants and mammals that are abundant in the watershed.

Upon visiting the Gitk̲'a'ata people, one quickly learns the importance of our connection to harvesting, ultimately placing the richness of *Laxg̲a̲lts'ap*'s ecology at the forefront of the Gitk̲'a'ata mind. Because of this richness, an abundance of Gitk̲'a'ata stories, teachings, laws and protocols address how to harvest all of the species who share *Laxg̲a̲lts'ap* with us. We human Gitk̲'a'ata belong to this ecosystem, and our history, knowledge and spirit are embedded within the landscape.

3 | METHODOLOGIES AND THEORY

For decades, Indigenous scholars have used Indigenous methodologies and theory to properly represent Indigenous knowledges within academia (Kovach, 2021; Smith, 1999; Wilson, 2008). Indigenous methodologies enable researchers to uphold and maintain Indigenous processes for obtaining and sharing knowledge (Weber-Pillwax, 2001), while affirming community benefits and responsiveness to community priorities (Brant-Castellano, 2004; Kovach, 2021). Though these methodologies stem from diverse cultures, they are rooted in a shared history of colonization and our contemporary realities as Indigenous peoples (Hayward et al., 2021; Little Bear, 2000).

Woven throughout this paper are expressions of how Indigenous methodologies use Indigenous Science (Cajete, 2018; Cohen, 2023). Indigenous science and theory converge on an understanding that our relationship with the Land,[1] and the systematic study of that Land, is at the crux of understanding how we fit into the natural world. Indigenous authors have shown how *Land is pedagogy* (Simpson, 2017; Tuck & Yang, 2012), and how land-based theory recenters ecologies as our primary teacher (Gaudet, 2019; Kovach, 2021). In keeping with these traditions, the Indigenous methodologies I apply embody the epistemologies of our people—a legal and pedagogical philosophy called *'gugwilx'ya'ansk'*. Below, this *gugwilx'ya'ansk* methodology is further broken down into three on-the-ground methods utilized by my Elders—*becoming*, *living and tending*.

In addition to Indigenous methodologies, I use autoethnography and take an autobiographical approach to this paper. In my experience, knowledge transfer most efficiently happens in situations where I was either harvesting, processing or sharing food with Elders. Autoethnography allows for personal experiences outside of formal research settings to be incorporated into research findings (Ellis, 2004). Not all contexts where I learn Indigenous knowledge or obtain 'data', reflect formal data collection processes within the disciplines of ecological study. For example, methods such as storytelling (Archibald, 2008; Drawson et al., 2017), ceremony (Atleo, 2004; Wilson, 2001), visiting and conversation (Gaudet, 2019; Kovach, 2021) and engaging with the land (Kimmerer, 2013; Simpson, 2017) are all methods I use in traditional contexts, but can also be utilized under autoethnography. As such, autoethnography is a non-Indigenous method that feels authentic to the processes needed to answer my initial research question, while honouring the educational context in which the majority of my learning took place: as a Gitk̲'a'ata person in Gitk̲'a'ata spaces and places.

3.1 | Gugwilx'ya'ansk: A Ts'msyen methodology

Gugwilx'ya'ansk is a philosophical term amongst the Ts'msyen that bleeds into all aspects of ecological governance, law and personal

[1]Indigenous scholars often use the term 'the Land' as an all-encompassing term for one's territory. The Land can include land, water, skies, incorporating a spiritually dynamic place. See Cajete, 1994; Lowan, 2009. When referring to 'the Land', Indigenous authors are capitalizing 'Land' to emphasize how it is alive and animate in Indigenous cultures.

identity. This term is often heard while attending the *luulgit* of any tribe. Within the *luulgit*, the legal aspects of *gugwilx'ya'ansk* are imposed upon an individual when they publicly receive a traditional name or title from their *pteex*, ultimately bringing new political responsibilities. *Gugwilx'ya'ansk* is roughly translated to 'for all-time passing down', and at a *luulgit*, masters of ceremony and Elders will speak to the metaphor of *gugwilx'ya'ansk* and how a person's name or title ties them to the indefinite responsibility of stewarding people and place. Often articulated collectively during public speeches, the words *adaawx* (histories), *ayaawx* (law) and *gugwilx'ya'ansk* regularly permeate the halls of the *luulgit*, used in a triad to emphasize good governance and societal order. *Gugwilx'ya'ansk* is a metaphor and philosophy that binds history and law while expressing a dedication to Ts'msyen ways of being and place for *all-time*.

The meaning behind *gugwilx'ya'ansk* becomes more impactful when one understands the importance of hereditary names within Ts'msyen society. Ts'msyen names are social and spiritual vessels that are passed down for millennia through specific protocol. They incarnate specific people for their lifetime, yet continue for *all-time*, from past ancestors through to the present moment, and into future successors (Roth, 2008). These names themselves index hereditary rights and responsibility to places, and regularly refer to regularly refer to plant, animal and other ecological phenomena in those places (Campbell, 2011, pp. 15; Roth, 2001). In contrast to Western practices where places are often named after people, the names of Ts'msyen people are derived from the environment. In fact, rather than Ts'msyen people imposing their names on a landscape, the landscapes are imposed on us through these names which represent the geographic area their stewardship responsibilities are tied to. Many cases of hereditary names referring to places of ecological and economic importance in my community—ranging from berry bushes to traplines within a *pteex's* territory. Through the act of naming people, ecological identity is intertwined with a legal responsibility and connectedness to place. This simple, yet profound, eponymous dynamic ties humans to the non-human world in a way that deeply contrasts with a Western concept of naming and ownership: we belong to the name, the name belongs to a territory, and we become the current incarnation or vessel acting on behalf of and in service to that territory during our physical lifetime. As such, it becomes engrained in Ts'msyen law that the hereditary name, regardless of who it incarnates, will continue to enable stewardship of a place for *all-time*. In essence, we have a governance system where it is legal process to train leaders and decision makers in what it means to hold ecological relationships and responsibilities to a specific place.

The Ts'msyen act of naming embeds the natural world into one's identity, allowing *gugwilx'ya'ansk* to prevent human-centric notions of governance. This land-based ethic is not uncommon across Indigenous North America and is modelled through TEK (Berkes, 2008; McGregor, 2004; Menzies, 2006; Nelson & Shilling, 2018). Many Indigenous oral histories and laws that incorporate TEK give the original instructions on how to be in agreement, care, relate and exist with specific geographies and its beings (Cajete, 2018). Ts'msyen law does this by seeing each species as a legitimate political entity within our governance systems (Miller, 1997). Because we recognize that each species has its own society with its own respective governance order, our law emphasizes the importance of engaging in the needs of each of these non-human societies. Throughout our time in our respective territories, we have had the responsibility to create amicable agreements with other species and beings, sometimes similar to what one would today call a treaty. From plants and animals to spiritual beings that live under the water, navigating the world of the Ts'msyen entails a legal and moral kinship with all non-human species (Barbeau & Beynon, n.d.; Marsden, 2002).

3.2 | Becoming, living and tending

Gugwilx'ya'ansk entails a triad of *becoming*, *living and tending*, each of which I have learned through an on-going journey of learning from my Elders. This education became more comprehensive when I received my Ts'msyen name *La'goot*. Upon receiving this name and assuming a more formal role in our governance system, several Gitk̲'a'ata Elders began passing down knowledge and associated stewardship practices to me throughout our territory, but specifically focused on *Laxg̲a̲lts'ap*. My mentoring follows traditional Gitk̲'a'ata gender roles, where male Elders of my paternal lineage (*wilksi'waatk*) teach me hunting, trapping and fishing skills.[2] There are many ecological management practices associated with women within and beyond my community, and highly ranked women at are the forefront of certain governance, stewardship and harvesting (Fiske, 1991; McGregor, 2013; Turner et al., 2012). However, I received less mentorship from women in *Laxg̲a̲lts'ap* due to cultural circumstance. Below, I discuss each step of *becoming*, *living* and *tending* separately in the order I was taught by my *wilksi'waatk*. Though the three steps were taught separately at times, it is essential to recognize that they are seamlessly interconnected, and to learn one without the others would make the process incomplete.

3.2.1 | Step one: Becoming a scholar

> "I went to college in Laxg̲a̲lts'ap"
> -Gamgagol, Matthew Bolton, Gitk̲'a'ata Elder (personal communication to author, 2016)

As alluded to in its translation 'for all-time passing down', *gugwilx'ya'ansk* necessitates both physical and intellectual

[2]Elders of my *wilksi'waatk* have been, and continue to be, dedicated to this traditional mentorship role. When I speak of harvesting and *mati* in this chapter, key members of my *wilksi'waatk* who have mentored me are: John Pahl (grandfather), Clyde Ridley (relative), Matthew Bolton (mentor), Harvey Ridley (relative), Allan Robinson (relative), Fred Ridley (relative), George Clifton (relative).

succession of knowledge and responsibility. In my time with my Elders, it was emphasized how much of this succession takes place on the lands and waters by passing down the stories, laws, protocols and practices in the landscape from which they derive. The significance of land-based knowledge transfer is echoed by other Indigenous scholars (Adelson, 2000; McCoy et al., 2017), as it is well understood that the acquisition of knowledge and incorporation of it into societal functions derive from a connection to an ecological system (Battiste & Henderson, 2000). As the above quote from my Elder Matthew Bolton suggests, the place to become a scholar of *Laxg̲a lts'ap*, was clearly in *Laxg̲a lts'ap*. While being there with him, I witnessed Matthew accessing a metaphorical land-based library and archive, enabling him to teach what had been taught to him. We walked through this archive together in a way that groomed me into being able to access it on my own, into the future, as long as I maintained my relationship with it. It was also clear that the more I participated within the archive, the more in-depth it became. This was extremely meaningful on a personal level, as both my research and my personal Gitk̲'a'ata responsibilities were able to sit together in one space. While being on the Land, both Matthew and I were continuing the pedagogical processes our ancestors had set in place *for all-time*.

3.2.2 | Step two: Living with the landscape

> "What is the point of prayer and meditation?"
> "…To bring you closer to the Great Mystery."
> "So I can understand it?"
> "…No. So you can participate in it"
> - Richard Wagamese (2016, pp. 75)

The excerpt above emphasizes a fundamental lesson in understanding relationship with the non-human world—that we must be an active participant, as opposed to a passive learner. While Wagamase is speaking to a spiritual context by referencing *the Great Mystery*[3] or the spirit world, I extend this analogy to also include our relationship with the natural world. Disassociation within non-Indigenous society has led to a commonly held mainstream misconception that humans are separate from the non-human world, and as a result, modern society lives a self-fulfilling belief of having an inherently negative influence on the landscape. Throughout my time in academia, I have noticed a drastic difference between academic and community-based Indigenous approaches to ecological study. At the core of this dichotomy are academic peers striving to *observe* and *understand* an ecosystem, where community-based Indigenous approaches strive to *live* and *participate* within it. Ts'msyen culture revolves around an active kinship with the natural world, which guides *gugwilx'ya'ansk* and its practitioners to build interdependent relationships with a place while existing within it. As with many species we harvest, each of them have told us that we are allowed to harvest them and how to do it. As such, animals are not asking us to *understand* them as a bystander, but to *participate* in the ecosystem with them.

3.2.3 | Step three: Tending the metaphysical connection

> "For the traditional Tsimshian Indian, animals and spirits are part of a continuum; man is the one who has to bridge the gap"
> - Marie-Françoise Guédon, (1984, pp. 140)

For the Ts'msyen, the politics of being human is understood as innately tied to spiritual and non-human worlds, and a major expression of this happens through metaphysical means. The establishment of each species' rights, or general communication within the species who have these rights, is done through the *naxnox*. *Naxnox* is a term used to describe both one's spiritual power, and the spiritual beings who deliver that power and communicate through it (Miller, 1984). Navigating the world of harvesting involves navigating the world of the *naxnox* (Guédon, 1984), as it is the channel where humans and non-humans communicate. On-going conversations and feedback from the *naxnox* dictate our human societal practice, which in turn become formally recognized, acknowledged and adopted within our governance structures.

Spiritual land-based management systems are not only common amongst the Ts'msyen, but many Indigenous peoples across North America (Anderson, 1996; Anderson & Pierotti, 2022). In the eyes of Nuu-chah-nulth Hereditary Chief *Umeek*, spirit is as necessary to the management of the physical reality as science is today, yet both can exist compatibly in a Nuu-Chah-Nulth worldview (2004). The late Sioux anthropologist Vine Deloria Jr. states, 'our ancestors invoked the assistance of higher spiritual entities to solve pressing practical problems', listing the many ways this was the case—from theoretical and governmental to practical and mundane (Deloria, 2006, pp. 7). Non-Indigenous anthropologists studying in North America have long referenced the phenomena of Indigenous peoples 'discovering knowledge' via spiritual dream realms, from Diamond Jenness amongst the Inuit (1922) to Hugh Brody amongst the Dane-zaa (previously referred to as the Beaver Indians) (1988).

Spiritual practices have been an analytical, forward thinking and inquisitive method to address curiosities and tribulations for as long as our cultures have existed. Just as a curious historian may go to the archive, or the curious archaeologist to the dirt, we Ts'msyen naturally turn to spirit and the *naxnox*. Spirituality, ritual and ceremony have been the language that has unlocked countless societal laws and functions that have allowed us to thrive in specific places for millennia.

[3]A term commonly used by many Indigenous people across North America to refer to the spirit world.

FIGURE 2 (a) Goat horn spoon from Hartley Bay, owned by Cameron Hill, passed down by his great-grandfather Ambrose Robinson; (b) Ts'msyen (Tsimshian) Chilkat robe made of dyed Goat wool and woven cedar bark. Photo credits: (a) Taken by author. (b) Artefact VII-C-2153 from the Canadian Museum of History. Used with permission.

4 | RESULTS: THE MATI (MOUNTAIN GOAT)

Nestled amongst the steep mountains of our coastal alpine fjords are the avalanche chutes, rocky crags and cedar bluffs where the *mati* make their home. Harvested by Ts'msyen people for millennia, they hold deep spiritual and cultural value to our people. In story and song, *mati* are often tied to shamanism and the spirit world and their presence is seen as enigmatic amongst many coastal Indigenous peoples (Samuel, 1982). Due to the inherent mountaineering risks, harvesting *mati* is seen as one of the most noble and dangerous hunts (Boas, 1916, pp. 402–406). Accompanying the intensity of the hunt and their spiritual presence is the reasoning behind their name. As described by my colleague Charles Menzies, a fellow *mati* enthusiast and scholar from our neighbouring community of *Gitxaała*, the word *mati*[4] is derived from the intense stare they give when face to face with them.

The meat and fat are highly prized, and many stories tell of renowned hunters being celebrated for the skills associated with the *mati* harvest (Barbeau & Beynon, n.d.; Boas, 1916). Their fat is treasured and regularly used in spiritual offerings, seen as a delicacy by both humans and non-humans alike. In one instance, the ability to host a *luulgit* of *mati* fat was considered 'the greatest contest ever known' (Barbeau & Beynon, n.d., 'Blood Revenge'). Specific parts of the animal are used for key ceremonial items. Horns are used for elaborate ceremonial spoons and as essential pieces of a shaman's headdress, carved in detail, they can represent one's lineage and invoke spiritual power or guidance (Figure 2a). Their hide and fur have several clothing and regalia related uses, the most prominent being the chilkat blanket, or *Gwishalaayt* 'shamans robe' (Figure 2b). For the *gwishalaayt*, the wool down is turned into beautiful strands, woven into yarn, and formed into a dancing robe that should only be worn by accomplished shamans or those of high chiefly rank. When danced, the oscillating fringed wool of the *gwishalaayt* invokes spirits, uniting the human, *mati* and spiritual world all in one instance.

Mati are represented in both tangible and intangible ownership. They are shown in crests, regalia and carvings, while some lineages own specific rights to stories and songs about them. The *Niistaxo'ok* and *Niis Haiwaas* lineage of the Kitselas tribe are prime examples of this, who amongst the Ts'msyen own the rights to the crest, songs, regalia and dances of the one horned goat—a key player in the most well-known *mati adaawx* (Wright, 2003). Ultimately *mati* have been braided into Ts'msyen life politically, economically, spiritually and ecologically for millennia.

4.1 | Step one: Becoming a mountain goat scholar

When becoming a scholar[5] of any species you must become cultured in four areas of study: history, law, ceremony and traditional

[4]I presume this is an ancient term, as I have been unable to find the linguistic breakdown of this word through conversations with Elders and consulting the *Sm'algya̲x* dictionary (Ts'msyen Sm'algya̲ x Language Authority (2014-2024), 2022).

[5]Scholar in the sense of being thoroughly trained in, and dedicated to, the education of a certain topic. I am speaking to becoming a scholar in an Indigenous context.

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ecological knowledge (TEK). My Elders first introduced me to the *mati* through the oral histories that come from a time when a branch of the Gitk̲'a'ata lived in the upper Skeena River millennia ago. Known in English as *The Downfall of Temlaxam*, *the Feast of the Goats* or *The Retaliation of the Goats*, this account is well known and recorded amongst the Ts'msyen, Gitksan and Nisg̲a'a peoples of the Pacific Northwest Coast (Barbeau & Beynon, n.d.; Barbeau & Beynon, 1915-1957; Boas, 1916; Harris & Robinson, 1974). The history describes the historical settlement of *Temlaxam*, an ancient village that all Ts'msyen communities have ties to today. The people of *Temlaxam* lived in excess and had lost their humility. Even when they didn't need food they would hunt for sport and entertainment. After a kill, people would make jokes and speak thoughtlessly around the bodies of dead animals, while leaving pieces of carcasses on the mountains they hunted as waste. This was a sign of true disrespect to all animals, and the *mati* especially. It sent a message to the spirits of the skies and mountains that their bones, meat or hides, aren't worth the effort of carrying home. The story has many details leading up to a climax of human disregard for *mati*. They begin capturing the *mati* for fun and bringing one young *mati* into the village to keep as a pet, where children learn the carelessness from their parents first-hand and make games out of tormenting the young *mati*. The story goes on to tell how strange men wearing white cloaks came into the village, inviting the people of *Temlaxam* to a *luulgit* in the mountains. Impressed by these men, the royalty, their delegates and noblemen of *Temlaxam* accept the offer and begin making the trek to a longhouse in the highest peaks of a mountain named *Stekyawden*. After an intricate performance involving dancing and songs, the hosts of the *luulgit* in the mountain dramatically turn into *mati* and dance and stomp on the floor so hard the longhouse collapses. Crumbling mountain tops send the visiting humans falling to their deaths in the steep crags and taluses of *Stekyawden*. Following this, the *mati* communicate to a lone survivor that humans may harvest them, but there must be laws, ceremonies and rituals accompanying the harvest. The human survivor is sent off to tell the people remaining in *Temlaxam*. The protocols for the hunt shared by *mati* long ago are still practiced today, and the *mati's* ability to heed warning echoes across the Ts'msyen landscape.

Following the stories of the *mati* came teachings for the rituals associated with the hunt. Complex multi-day rituals involve fasting, visioning or dreaming and ingesting medicinal plant mixtures—these serve both as spiritual cleansing, physical training and a communication pathway with the *mati*. Alongside these rituals the hunter engages in cold water spiritual bathing at specific sources, most often freshwater pools, rivers or waterfalls, that have been identified for their spiritual significance. Finally, one is also taught how and when to give offerings and call upon guides and ancestors during the hunt, and the appropriate prayers and chants post-harvest. An example of this is a learning the specific chant and offering to the *mati* and the mountain it resides on, to ensure we don't repeat the disrespect inflicted when we left carcasses on the mountains of *Temlaxam*. Each of these ritual steps have different meaning and purpose making the intricacy of a *mati* hunt run deep.

Preparation for the hunt spans many locations across the watershed, incorporating a diverse set of ecological knowledges. I was first taught how inherent ecological knowledge is in *mati* harvest through medicine and plant knowledge. Each larger ritual has its own processes that necessitate specific medicines and plants. Each of these medicines and plants come with their own rituals, rules and reasons for harvest. For example, harvesting plants may involve prayer, song or offerings, accompanied by rules on how many and at which location to harvest to ensure one doesn't offend or overuse the plant. Also, one must know the seasonality of when to harvest the plant to ensure its medicinal power is appropriate, and how much one should ingest or use of each medicine so they aren't lethal. Some plants used in my *mati* hunts are devils club (*wooms*; *Oplopanax horridus*), hemlock (*gyiik*; *Tsuga heterophylla*), cedar (*amg̲a n̲*; *Thuja plicata*), licorice fern root (*tsik'a'aam*; *Polypodium glycyrrhiza*), false hellebore (*huułens*; *Veratrum*), red alder (*luwi*; *Alnus rubra*), lungwort (*na'a g̲a n̲aaw*; *Lobaria pulmonaria*) and yew (*sahakwdak*; *Taxus brevifolia*), amongst others.

Second, I was taught the seasonality of the *mati* harvest and why. This harvest usually happens during two seasons, early fall and late winter. In the early fall their fat content is in its prime as they have not gone through their late fall/early winter mating season. Their wool is also at its best form for making the yarn and materials of the *gwis halaayt*, as winter guard hairs have not overly disturbed the valuable wool layer. In the late winter, coastal *mati* stick to predictable winter routes in a terrain of old growth cedar and lower elevations due to a deep snowpack. *Mati* meat was especially valuable at this time as winter was often associated with food scarcity. Winter hunts would happen prior or during the annual oolichan (*'ẅa h̲*; *Thaleichthys pacificus*) harvest and represent the first fresh game meat of the incoming year.[6]

Under Gitk̲'a'ata law it is encouraged to only harvest males, as females are necessary for future populations and don't necessarily give birth each year. During both early fall and late winter, it is common for the males and females to live separately, making it easier to differentiate the sexes and conduct a sex-selective harvest. Today, we use rifles or archery, and historically different close-quarters methods were used to aid a selective harvest. These methods included snares, deadfall traps, spearing and pushing off cliffs. In each of these techniques, countless hours are dedicated to learning *mati* biology and terrain, and regardless of the tool, we carry longstanding morals, values and lessons into the harvest. It is also emphasized by our Elders to keep the teachings and lessons associated with the *mati* in the back of our minds when not actively hunting them but engaging in activities like watching, feasting on or talking about them. Practicing ongoing humility and respect towards the *mati* is essential in being a *mati* harvester. From the ritual water sources and medicinal harvests, to navigating the mountain and harvesting the goat itself,

[6]The arrival of the oolichan was often considered the new year, signifying the end of food scarcity and a closeness to spring. The arrival of the oolichan is still celebrated today in a time known as *Hobiyee*.

the process of hunting *mati* is embedded within knowledge that holds an academic rigour.

4.2 | Step two: Living with the landscape

Living with the landscape revolves around becoming a part of the ecosystem through the roles of steward and harvester as guided by *gugwilx'ya'ansk*. Though it may seem contradictory to the non-hunter, humans participating in the ecosystem also bring security for the *mati*. By welcoming humans into their eco-system, they are welcoming stakeholders[7] invested in their survival and place (McQuaid, 2022). Human participation as a stakeholder comes with an array of actions that benefit the *mati*, from habitat improvement to predator management (Housty et al., 2014; Mahoney & Geist, 2019). As shown in our oral histories, the *mati* just needed to show us how to be in relationship with them. Taking on these stakeholder roles are a part of honouring this relationship.

Honouring this relationship begins with consistently being on the lands and waters. A lot of my time in *Laxg̲a̲lts'ap* was consumed by learning how to fit in and survive in the watershed. Often in my visits where harvesting was a focus, we packed few provisions to force *participation* on the landscape by living off the Land. In some instances during these trips, I would be in isolation for as long as 2 weeks. There are many intricacies of participating in place. They range in complexity from tasks as simple as knowing the best water supply alongside three to four back up water supplies, to watching and knowing game trails where you can identify specific animals' patterns months or years before harvesting it. Because I strive to be a part of this ecosystem, I should strive to function within it as well as my neighbours: the birds, the wolves, the bears, the weasels and of course, the *mati*. Though this goal may be unattainable, simply striving to know them leads to situating yourself within the system, rather than separate from it. Land-based decisions can then flow from that place.

Another aspect of *living with the landscape* is the direct correlation between harvesting and Gitk̲'a'ata governance. Because different Nations, *pteex*, and *waap* have access to different territories and resources, the *luulgit* facilitates a sharing, or at times a taxation, of speciality resources that come out of unique areas—such as *mati*. As the political institution, the *luulgit* provides a space for wealth to be dispersed amongst Nations, clans, houses and lineages. Each harvest comes with specific laws on distribution often reflecting a gift economy (Eisenstein, 2011; Kimmerer, 2013; Kuokkanen, 2007), where the more you disperse and care for your citizens, the wealthier you are. My Elders often remind me that 'The richest chief's house is always empty', referring to the continuous distribution of one's goods. Yet in this dynamic, the social relationships built through the gift economy ensure that chief is also very well taken care of, and it doesn't take long for their house to become *full*. Regardless, one's stewardship of place directly relates to how well they can take care of their own people, which in turn reflects their societal standing.

For the Gitk̲'a'ata, a communal approach to ecological stewardship and monitoring is understood as essential. Though I may be one of few *mati* hunters in my community, I am one of many holding a role within our traditional governance system engaging in *gugwilx'ya'ansk*. Any citizens that engage in *gugwilx'ya'ansk* also have eyes on-the-ground, while actively harvesting in their own specialized areas. Each person contributes to the detailed insight we get on the Land, and as a collective, we are simultaneously tending to and harvesting from the landscape while managing it. When I am not on the *mati* grounds, many community members update me on sightings, numbers or any on-going ecological phenomenon, allowing me to continue to hold my role and responsibility to my community and the *mati*.

4.3 | Step three: Tending the metaphysical connection

To balance the scientific/analytical aspects of participating within an ecosystem, I look to the spiritual world and the nuances of navigating our spiritual laws. Spiritual messages from the world of the *naxnox* can range from large political decisions, to where and when to harvest something. In the context of hunting, there is a theme shared to me by my Elders on how animals have agency to approve or disapprove of hunting. Often, their approval comes in the form of giving themselves up to a hunter, in our language we call this, *lip gils k'yilams*, roughly translating to English as 'to give their own'. We believe animals offer themselves by judging their own species' current condition, a community's needs, and whether the legal, physical, spiritual, mental and emotional actions of a hunter are in alignment. A story that resonates with this comes from the Nuu-chah-nulth whale hunt, where a hunt wouldn't begin until one received messages from the spirit world and knew they had acquired the power to have the animal give itself up (Atleo, 2004). In other words, if the animal doesn't actively choose the hunter, the hunter isn't ready to go hunting.

For the Gitk̲'a'ata, much of the animal's judgement of the hunter is dependent on the hunter's *naxnox* power and how well they use that power in pre-established rituals. Thus, my own journey involved learning what it takes to navigate the world of the *naxnox* to get an animal to give itself up. Once in the world of the *naxnox*, a door opens for on-going communication with the spirit world about when or how to harvest. Navigating the ritual process feels like a metaphorical courtship of the animal. For weeks leading up to a hunt, one uses spiritual guidance and cultural teachings to both lure and prove to the animal it is worth giving themselves up. If you are a dedicated hunter, you often find yourself in this continual courtship for many species throughout the year—leading to a life of deep spiritual introspection, restraint and ecological study.

[7] I am aware of the potential baggage of the term, and its association with government policy and commodification of lands. In an effort to remove the term from modern industrial implications, its use in this paper derives from the word's original broader context: analogous to a person whose future is at stake or tied and indebted to something external to themself.

In the case of the *mati*, the courtship is a drawn-out dance to align oneself in the world of the *naxnox* and the *mati*. It begins with different offerings of valuables, foods or songs, while collecting the necessary medicines that are used prior to or during fasting and cleansing. It then turns to fasting for vision or dream and insight into the *naxnox*. I am hesitant to explain these ceremonies in detail, as it is seen as taboo and irresponsible to publicize them, a common theme for Indigenous peoples (Brown & Cousins, 2001; Gone, 2017). Instead, I will share a few broad ceremonial outcomes to demonstrate how spiritual knowledge is incorporated into the success of a properly conducted hunt. In my experience, outcomes often include dreams or visions of *mati* that speak to herd health and location. For example, herds showing themselves in location and in large numbers—indicating healthy populations that are worthy of hunting; images of *mati* herds showing a struggling population—indicating we should think twice about hunting the area; or a specific animal giving you its location and the method for hunting it. Accompanied by this can be details such as songs, specified offerings, rites or directions specific to the hunter that are not publicized. After receiving this knowledge, the days leading up to one's departure for the hunt are spent at sacred sites in cold water bathing ceremonies that continue to improve the physical and mental character of a hunter.

The ceremonial process continues through the journey to the hunting site. For instance, there are culturally significant places enroute, that hold both *naxnox* and ancestors, where we offer pieces of *mati* fat into the ocean. Upon arriving at the mountain, and throughout the hunt, we observe and reflect on all the intricate teachings from our ancestors and their stories, while doing our best to maintain the spiritual courtship and dance that is at play.

Each spiritual practice strengthens our mind, body and spirit, and teaches us how to be a more thoughtful, careful and patient person. As recorded in one Ts'msyen oral history 'the man who does not seek restraint, shall never know endurance and fortitude; he shall never have visions of the spirit world, never grasp the dictates of unseen wisdom' (Barbeau & Beynon, n.d., pp. 34). The more a hunter can grasp the 'unseen wisdom', of the *naxnox*, the more solutions and clarity they find as a steward, while maintaining the communication paths between humans and animals.

5 | DISCUSSION

The three ways of knowing described in this paper, *becoming*, *living*, *tending*, are common amongst traditional land-based cultures globally (Atleo, 2004; Balee, 1985; Brody, 1988; Rydving, 2010; Thornton, 2008; Welch, 2014). Much more is written on these perspectives and there are many insights to glean from each culture who is willing to share these ways of being. The essence of relationship, story, spirit and governance are commonly woven throughout Indigenous hunting cultures (Nadasdy, 2003). However, this stands in stark contrast from people who have been removed from the Land, who perhaps need these lessons the most. Today, there is a complexity to what extent Indigenous peoples can engage in their harvesting systems. Colonization has physically removed many people from the Land, and when it has not, it has attempted to destroy Indigenous knowledge and language systems (Robin et al., 2021). Alongside ongoing urban sprawl and industrial development, there are misinformed ideas by non-Indigenous people on what it means to participate in an ecosystem. For example, 'loving nature death' through the slow degradation of a landscape via superficial protectionism and outdoor enthusiasm (Smith et al., 2023). Indigenous food cultures are at the whim of the Western world's dichotomies with nature.[8] Though these dichotomies highlight disconnection, there is always opportunity for reconnection. Below I offer some personal reflections on *becoming*, *living* and *tending*, and how their lessons may help all people relate better to the Land.

5.1 | Reflections on becoming a scholar

At the forefront of Indigenous hunting is education deriving from a traditional moral code (Reo & Whyte, 2012). The Ts'msyen *mati* hunt is strict and guided by protocol. It has been my experience the *mati* hunt is reserved for people who have trained and proven their mental, physical and spiritual strength. Hunter education is one of the foremost attributes of being a harvester and it encompasses a wholistic way of understanding the *mati's* place in this world. The privilege of hunting *mati* is awarded to those who understand and live the ceremonies, stories and TEK associated with that animal. One's competency is the decisive factor around 'who should hunt', as ensuring hunters have the confidence of the community to make knowledgeable decisions is of utmost importance. The cultural emphasis on moral education and training recalls Robin Wall-Kimmerer's description of the *honourable harvest*: 'know the ways of the ones who take care of you, so you can take care of them' (2013, pp. 183)—a lesson that has been long described by Indigenous people.

The knowledge associated with these pedagogies has always been land-based, and as a result, the way we teach them must be land-based to continue these knowledge systems. Removing ourselves from ecosystems to teach ecology has never been a part of *gugwilx'ya'ansk*. In reference to the Anishinaabe teacher/trickster archetype *Nanabush*, Michi Saagiig Nishnaabeg author Leanne Betasamosake Simpson sums up her critique of modern models of education in the following way: 'I imagine myself talking about postsecondary education with *Nanabush* right now, and he immediately ask[s] me why I think spending sixty hours a week indoors in a classroom or on a computer is Indigenous education at all' (Simpson, 2017, pp. 164). Indigenous pedagogy, including

[8] *Nature* is another term where in some contexts it is antithetical to Indigenous thought. Sometimes during its use a separation between humans and the non-human world is implied, othering non-humans as a result. It is not my intent to use this term in such a narrow fashion; *nature* refers to the natural world, of which humans are an inherent part.

storytelling and oral transmission, has long been tied to the Land (Archibald, 2008).

Protecting landscapes that host Indigenous knowledge systems like those described in this paper are essential to improving mainstream society's relationship with nature. Indigenous ways of education are becoming empowered and as a result are influencing mainstream narratives of pedagogy (Cote-Meek & Moeke-Pickering, 2020). This is despite the fact that access to Indigenous knowledge is complicated in a colonial context due to ageing Elders, the impacts of the Indian residential school system and forced removal of Indigenous peoples from their territories (Fernández-Llamazares et al., 2021). A necessity in re-educating industrial society is defending land-based cultures and the governance systems that have upheld the environment they have resided within for millennia.

5.2 | Reflections on living with the landscape

Living with and learning from the land requires being immersed in its daily lessons and teachings. A fundamental issue in Western ontologies and modern society is that we allow ourselves to live like we are separate from nature's ecosystems, when we know we are not. Human relationships with biological worlds shift when we see nature as something to actively *participate* in (Kimmerer, 2013), as opposed to a space to passively study, watch, understand and extract from. If we instead approach scientific inquiry as a vehicle for discovering how to cultivate and kindle moral relationships between all biological beings (Whyte et al., 2016), we can then understand how to look at human flaws and shortcomings with our relationships with the natural world and address them as such. Such a paradigmatic for non-Indigenous people and their management systems can yield the reciprocity and relationality with nature we see in many Indigenous communities (Lertzman, 2009; Thornton, 2010).

Through living *with* an ecosystem, human ingenuity can thrive and find ways to bring reciprocity to the non-human world. Western science increasingly recognizes how many Indigenous harvesting practices do this by managing ecosystems, encouraging biodiversity and proliferating species' numbers through human participation. Academics have identified several culturally significant species on the Pacific Northwest Coast, that I personally harvest within Ts'msyen territory (Figure 3): pacific crabapple (Armstrong et al., 2023; Wyllie de Echeverria, 2013), roots and shoots (Turner et al., 2021), seaweed (Turner & Clifton, 2006), salmon (Atlas et al., 2021; Menzies & Butler, 2007), halibut (Malindine, 2017; Stewart et al., 2021) and shellfish (Lepofsky et al., 2021; Thompson et al., 2020; Toniello et al., 2019)—amongst many other species yet to be studied in detail. Humans have the ingenuity, heart and spirit to build similar relationships with their non-human neighbours if they adopt a non-exceptionist dedication to place.

A relationship with land is not just an idea, it is a practice that involves a bundle of relationships (Borrows, 2019b). To honour this bundle of relationships, we should strive to incorporate ourselves into the Land, give thanks to and participate in the ecosystem we reside within as much as possible. For most, this can simply look like leaning into your own 'backyard' to meet a myriad of human needs. I hope more people can become practitioners of ecology in some way—whether it is urban gardening or alpine hunting.

5.3 | Reflections on tending the metaphysical connection

My culture would be quick to point out that our numeration and scientific inquiry were always inseparable from spirit. We believe a holistic approach to knowledge is a given and makes inquiry more rigorous. The combination of ecological knowledge and spiritual communication has provided us with many methods of harvesting that put reciprocity and relationality at the forefront of our land-based activities. In many instances our instructions are explicitly given from the spirit world. For example, how the sculpin taught humans to build an oolichan net that allows for sustainable harvest (Ts'msyen Sm'algya̱ x Language Authority, 2019); or how the halibut hook was given to a shaman from the spirit world, allowing us to practice selective ground fishing (Smythe, 2018); and similarly, how the salmon pulled a boy under the water to teach humans the protocols associated with their harvest (Miller, 1997). The crux of these stories is that spirit is embedded in Gitk̲'a'ata science and education, as shown through TEK.

Another essential aspect of spirituality in our culture is how spirit manages our moral code. Often, managing an ecosystem is about managing how people relate to and engage with that ecosystem (Anderson, 1996). Beyond direct communication with the *naxnox*, our spiritual practices act as reminders for the hunter to be humble and inquisitive, while engraining morality and a land-based ethic.

Adding a spiritual and moral ethic to our relationship with nature is especially important due to nature's many unknowns. Today, we humans have endless inquiries about the natural world. Spirituality allows us to name the unknown, while diving into it and exploring it further. In addition to this, naming the unknown encourages us to extend morality to it. When left unnamed, unaddressed or dismissed, we limit our ability to discuss, understand and be in a moral relationship with aspects of the world we don't understand. Thus, I have faith in the wholistic ways of finding wisdom, knowledge, relationship and insight into ecology. For me, this conversation undoubtedly involves spirit.

6 | FINAL THOUGHT

Anishinaabe legal scholar John Borrows has stated 'the earth is alive. It has a culture and we can learn from her' (Borrows, 2019b, pp. 150). This paper is one story of what my people have learned from the earth's culture and how I have incorporated it into understanding and practising ecological stewardship. The focus of this paper has been on hunting as a specific activity and *mati* as

PEOPLE AND NATURE BRITISH ECOLOGICAL SOCIETY

FIGURE 3 Author harvesting in Gitga'at territory: (a) mati (mountain goat); (b) txaw (halibut); (c) ła'ask (seaweed). Photo credits: (a) Taken by Gary McQuaid. Used with permission. (b) and (c) Taken by Natalie Ban. Used with permission.

a specific species, but the lessons can translate into all the ways humans take resources from an ecosystem. When incorporating these Gitk̲'a'ata ways of being, what one might consider 'taking' becomes more of an exchange. The Gitk̲'a'ata have established agreements with each species where there is a metaphysical, and at times scientifically tangible, mutually beneficial exchange. Species-specific protocols, processes and histories define this exchange, and we continue to honour them because both parties are indebted to this relationship.

When participating in an ecosystem in a reciprocal way, we provide for many beings in that landscape. This is in stark contrast to a harvester who is not connected to a specific place, where there is no exchange between harvester and harvested, and where the goal of the harvest is to 'take' a resource to fuel a life lived elsewhere. This is how *becoming*, *living* and *tending*, have laid the foundation for reciprocity. By participating in the ecosystems of my territory physically and spiritually, I become a hunter, partner, steward and kin, deeply invested in the well-being of each species I rely on. Each successful hunt is an exchange of life—from the micronutrients that seep into the earth after each harvest, to the offerings given to the *naxnox* who oversee aspects of the natural world we don't understand. Meanwhile, the act of providing physical sustenance for myself and other Gitk̲'a'ata citizens is supporting the governmental mechanisms that solidify an ecological and conservationist morale on the landscape. This weddedness of human to ecosystem brings out the ingenuity of Indigenous harvesting and is what allows entire communities, nations and civilizations to achieve relationality and reciprocity with the non-human world, *for all-time*.

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